

SERVICE MANUAL

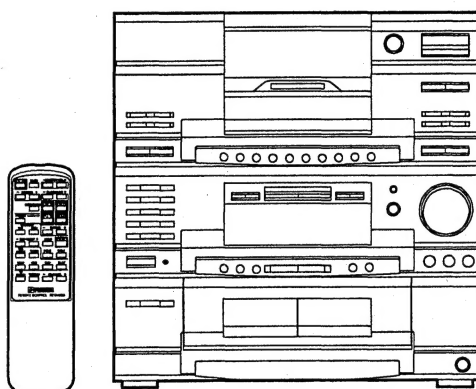


FISHER®

TAD-9625

(US)

**Audio Home Entertainment
Center with Dolby Pro Logic
and Studio 24 CD Management**



PRODUCT CODE No.
129 493 00

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REFERENCE No. SM580718

SPECIFICATIONS

AMPLIFIER

Main Amplifier

Continuous minimum sine wave RMS power output per channel at 8 ohms from 40 Hz to 20 kHz with no more than 0.9% total harmonic distortion (with Center/Surround amplifier off) 100 watts

Center Amplifier (CENTER)

Continuous minimum sine wave RMS power output at 1 kHz into 8 ohms with no more than 0.9% total harmonic distortion (with Main/Surround amplifier off) 15 watts

Surround Amplifier (SURROUND)

Continuous minimum sine wave RMS power output per channel at 1 kHz into 8 ohms with no more than 0.9% total harmonic distortion (with Main/Center amplifier off) .. 15 watts

Bass control ± 10 dB (100 Hz)

Treble control ± 10 dB (10 kHz)

Dynamic bass +10 dB (100 Hz)

Input Sensitivity and Impedance:

PHONO 3.0 mV/47 kohms

VIDEO (Audio) 300 mV/47 kohms

Outputs (Nominal Impedance):

SPEAKERS 8 ohms

PHONES 8 ~ 32 ohms

TUNER

(FM)

Tuning range:

In 200 kHz steps 87.9 ~ 107.9 MHz

In 50 kHz steps 87.5 ~ 108.0 MHz

Usable sensitivity (MONO) 15.2 dBf

(AM)

Tuning range:

In 10 kHz steps 520 ~ 1710 kHz

In 9 kHz steps 522 ~ 1710 kHz

Sensitivity 700 μ V/m (AM Loop antenna)

CASSETTE DECK

Track system 4-track, 2-channel stereo

Frequency response 60 Hz ~ 12.5 kHz (Normal tape)

Signal-to-noise ratio 52 dB

Wow/flutter 0.18 % (WRMS)

Fast forward/rewind time Approx. 110 sec. (C-60)

CD CHANGER

Type 24 Disc Bi-Directional, Radial Transport

Channels 2-channel stereo

Sampling frequency 44.1 kHz

Pick-up Optical 3-beam semiconductor laser

Frequency response 20 Hz ~ 20 kHz

Signal-to-noise ratio 95 dB

Wow and Flutter Below measurable limits

GENERAL

Power requirements AC 120 V ± 10 %, 60 Hz

Power consumption 230 Watts

Dimensions (W x H x D) Approx. 14.2" x 16.5" x 16.5"

Weight Approx. 39.6 lbs.

REM-M9625 WIRELESS REMOTE CONTROL

Power requirements 3VDC - Two "AA" batteries

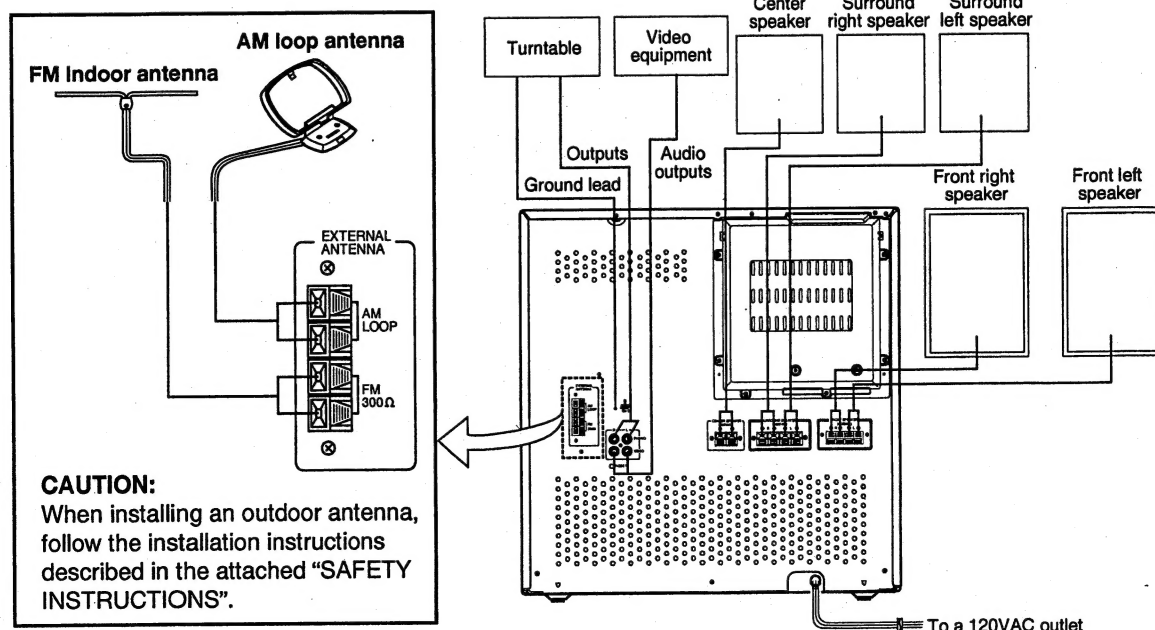
Dimensions (W x H x D) Approx. 2.0" x 6.9" x 0.7"

Weight Approx. 2.1 oz. (without batteries)

Specifications subject to change without notice.

"Dolby" and the double-D symbol s are trademark of Dolby Laboratories Licensing Corporation. Dolby Noise Reduction system is manufactured under license from Dolby Laboratories Licensing Corporation.

CONNECTIONS



LASER BEAM SAFETY PRECAUTIONS

**Do not look directly at the laser beam coming from the pick-up or allow it to strike against your skin.
Do not apply power if there is a broken part in the laser output section of the pick-up.**

STRUCTURAL SAFETY INTERLOCK

The disc chuck lever and the top lid of this unit prevent the laser beam from being exposed.

INVISIBLE LASER RADIATION • AVOID DIRECT EXPOSURE TO BEAM. CLASS 1 LASER PRODUCT.
OUTPUT POWER: 0.6mW MAX. WAVELENGTH: 790nm

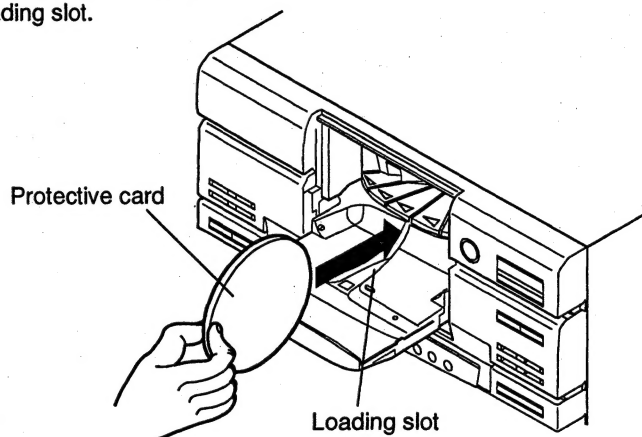
BEFORE USE OR TRANSPORTATION _____

Before use

1. Press [DOOR OPEN], then remove the protective card before operating the unit. (Please refer to the illustration.) The protective card is used to secure the CD mechanism during shipment and should be retained for future use.

Before transportation

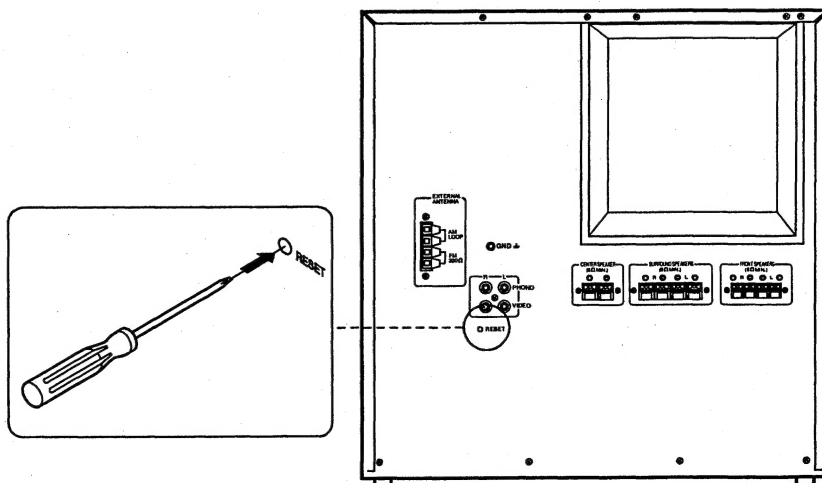
1. Remove all discs from the unit.
2. Check that "NO DISC" appears on the CD display after pressing [DISC CHECK].
3. Turn off the power, then insert the protective card into the loading slot.
4. Close the loading door.



OPERATING THE RESET SWITCH _____

This unit is provided with a reset switch on the rear panel. The reset switch serves to initialize the microprocessor in the unit which controls the CD-CHANGER, TUNER, TAPE-DECK and AMPLIFIER section. If the unit is to be serviced or key input is not acknowledged even when the CD, TUNER, TAPE DECK and etc. operation buttons are pressed, press the RESET switch and initialize the microprocessor following the step below.

- 1). Disconnect the AC power cord from the power outlet.
- 2). Keep the RESET switch depressed for 20 seconds. (The backed up electrolytic capacitor is discharged by keeping the RESET switch depressed.)
- 3). Reconnect the AC power cord to the power outlet.
- 4). Press the CD-CHANGER, TUNER, TAPE-DECK and etc. operations, and check their operation.



HANDLING THE PICK-UP (CD)

1. Shipping and storage cautions

- The pick-up must be stored in a conductive bag until immediately prior to its use.
- Do not drop it or subject it to impacts.

2. Repair cautions

- When handling the pick-up, be careful not to give it undue force or shock by your hands. Otherwise the pick-up may malfunction or the PCB may be cracked.
- The pick-up which has been minutely adjusted before shipment as one part. Never touch and move the adjusting points and setscrews of the pick-up unless otherwise described in the item of adjustment to avoid damage.

- A strong magnet is used in the pick-up. Do not bring a magnet or other magnetized object near to it.

d. Cleaning the lens

- * If dust gets on the lens, clean it away by using an air brush such as used for a camera lens.
- * The lens is held in place by a spring. If the center of the lens is dirty, carefully clean it using cotton swab moistened with isopropylalcohol. Since special coating is made on the surface of the lens which is made of plastics, do not use other kind of alcohol and cleaning fluid to prevent damage to the lens. Also, be careful not to bend the lens spring when cleaning.

BEFORE REPAIRING THE CD CHANGER

1. Preparations

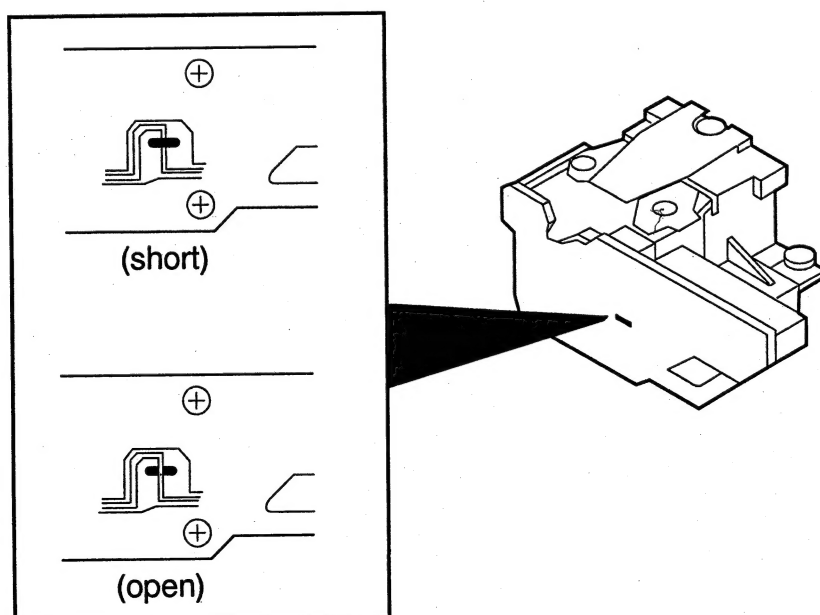
- Many ICs, LSI and the Pick-up (laser diode) are used in the compact disc player. These components are sensitive to static electricity, and might be damaged by static electricity or high voltage, so particular care should be taken regarding this point.
- Many precision components and the lens are used in the pick-up. Never attempt to make repairs, or to store parts, where the temperature or humidity is high, where magnetism is strong, or where there is much dust.

2. Notes regarding repairs

- Be sure to first disconnect the power plug before attempting to replace any component.
- All tools, instruments, etc., used for measuring must be grounded. Grounding can be accomplished by using a conductive metal sheet on the work bench.
- To prevent AV leakage of the soldering iron, ground its metal parts.
- Repair personnel must be grounded.

REPLACEMENT OF PICK-UP

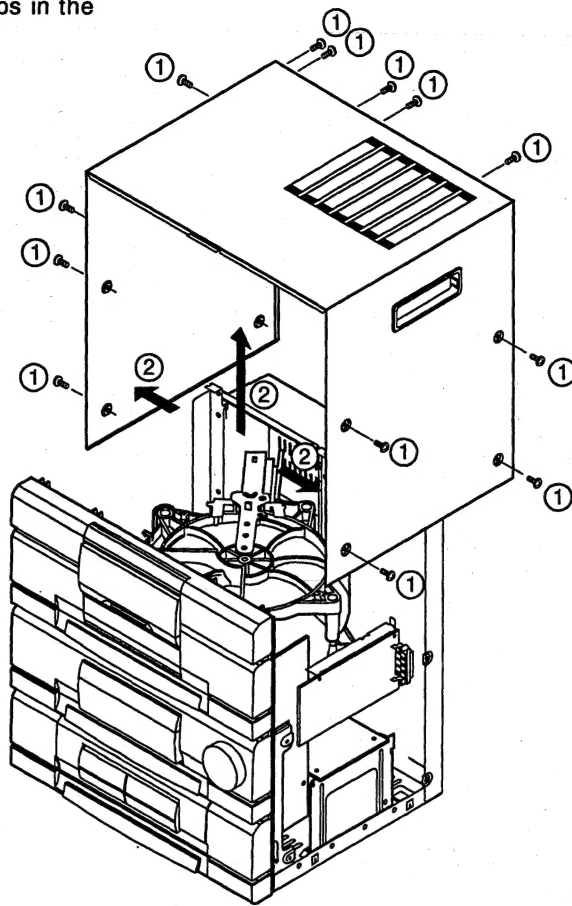
- The pick-up P.W. Board pattern is "shorted", as shown in the figure, so that the new pick-up will not be susceptible to the effects of static.
- Set the pattern to "open" after the pick-up has been replaced.



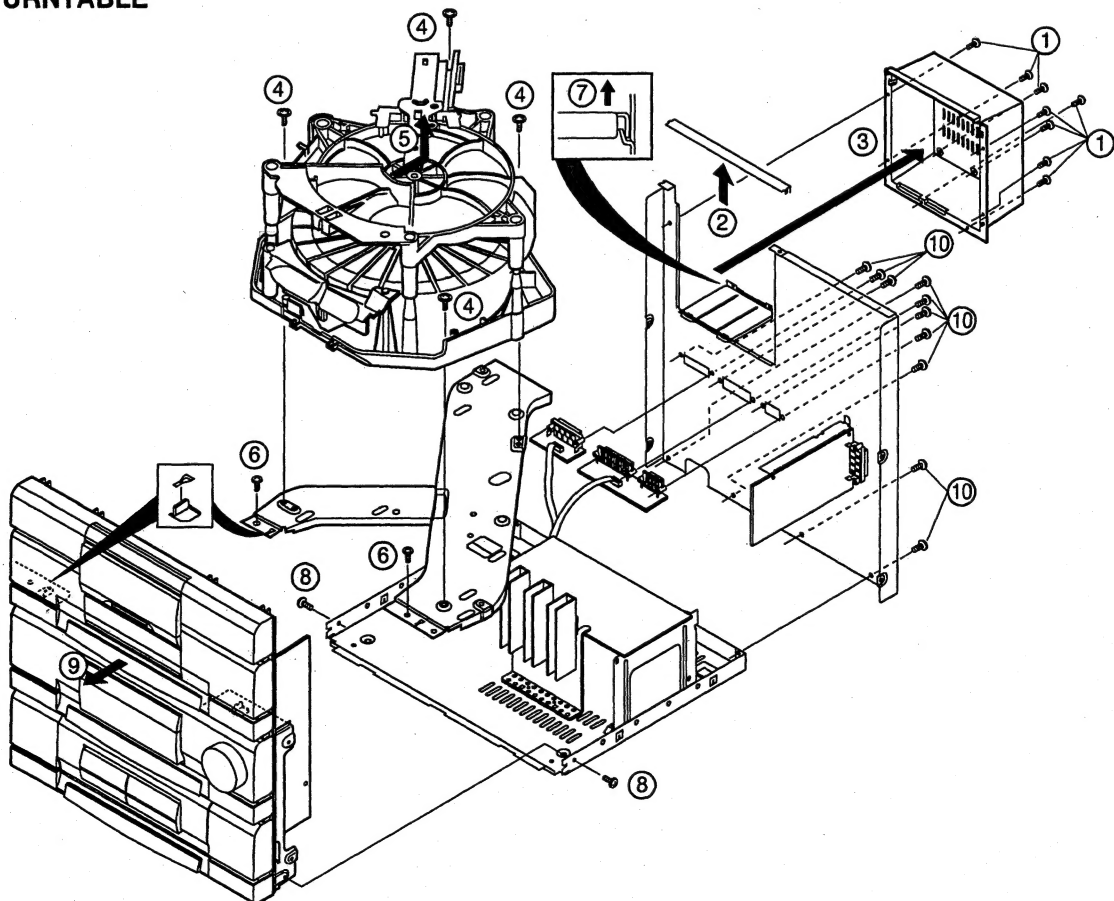
REMOVAL AND INSTALLATION

When disassembling, perform the steps in the numerical order listed in each figure.

a. CABINET

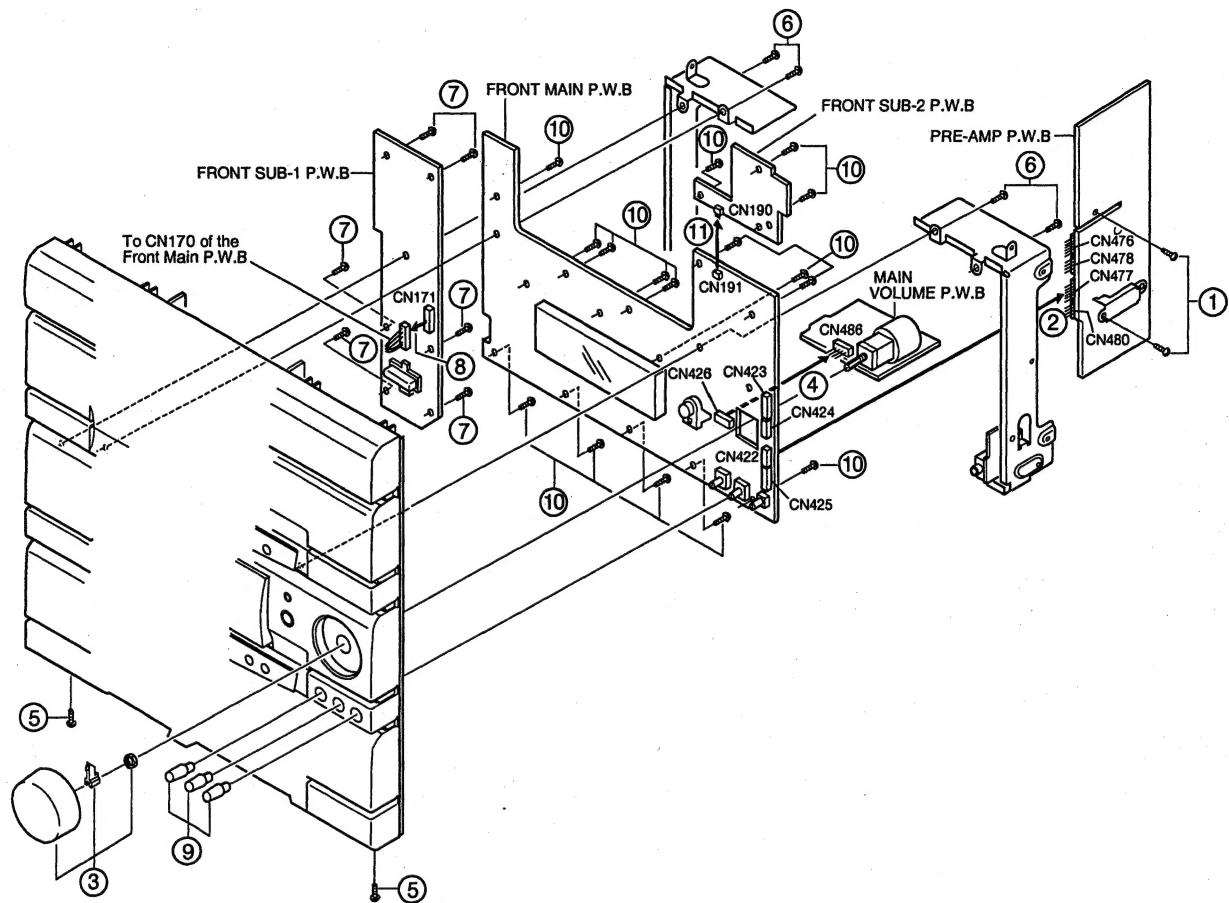


b. PANEL & TURNTABLE



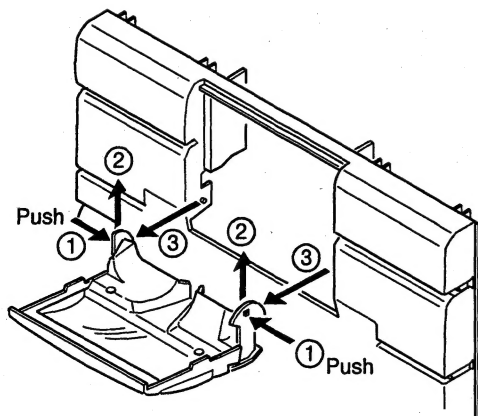
REMOVAL AND INSTALLATION

c. P.W.BOARDS

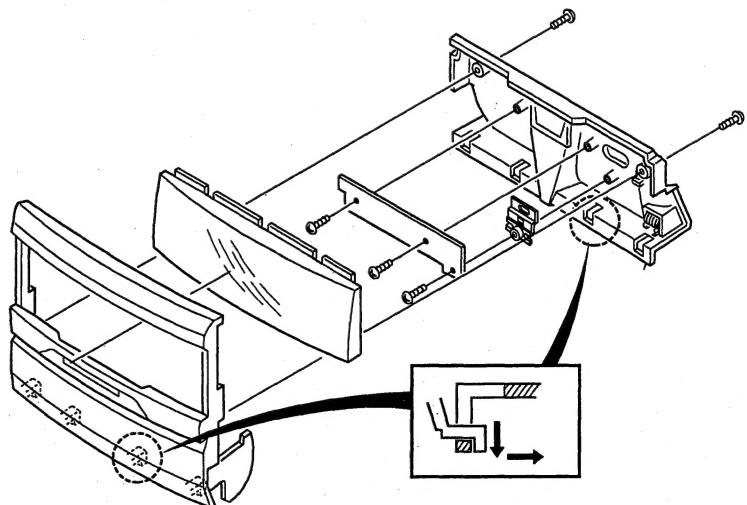


d. CD DOOR & REAR COVER

(a) CD DOOR



(b) LAMP & EJECT SWITCH P.W.B.

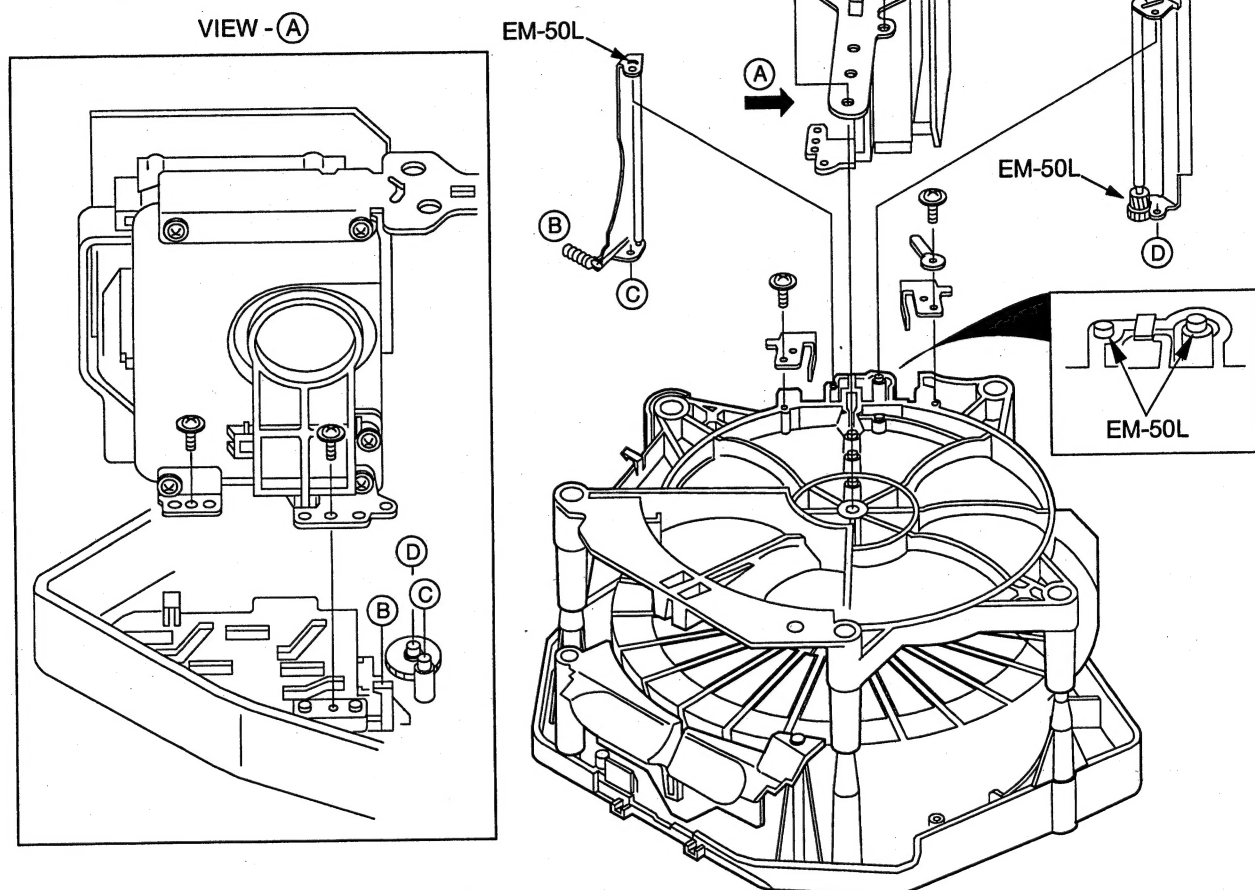


REMOVAL AND INSTALLATION

e. 24-DISC TABLE (TURNTABLE)

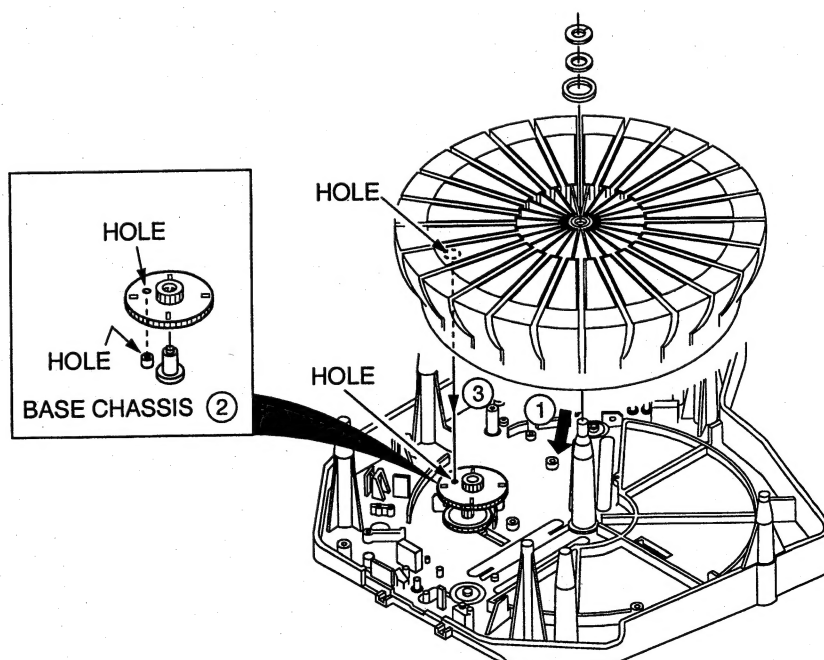
- Apply MC-grease "EM-50L" to the places indicated in the diagram.

f. CD MECHANISM



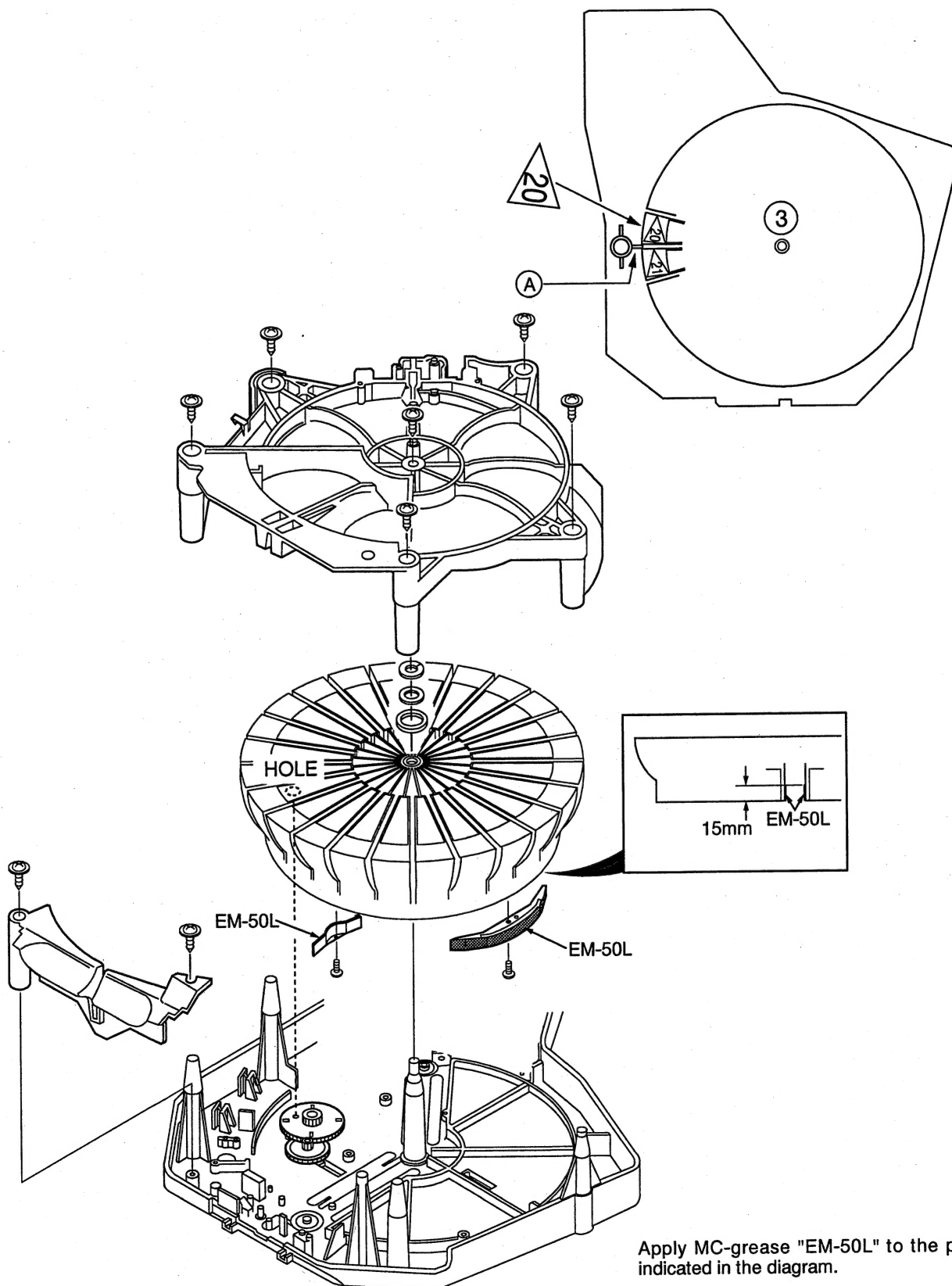
g. INSTALLATION OF TURNTABLE

- (1) Move the disc slide to the position indicated by the arrow. (①)
- (2) Align the hole in the base chassis with the hole in the turntable gear. (②)



REMOVAL AND INSTALLATION

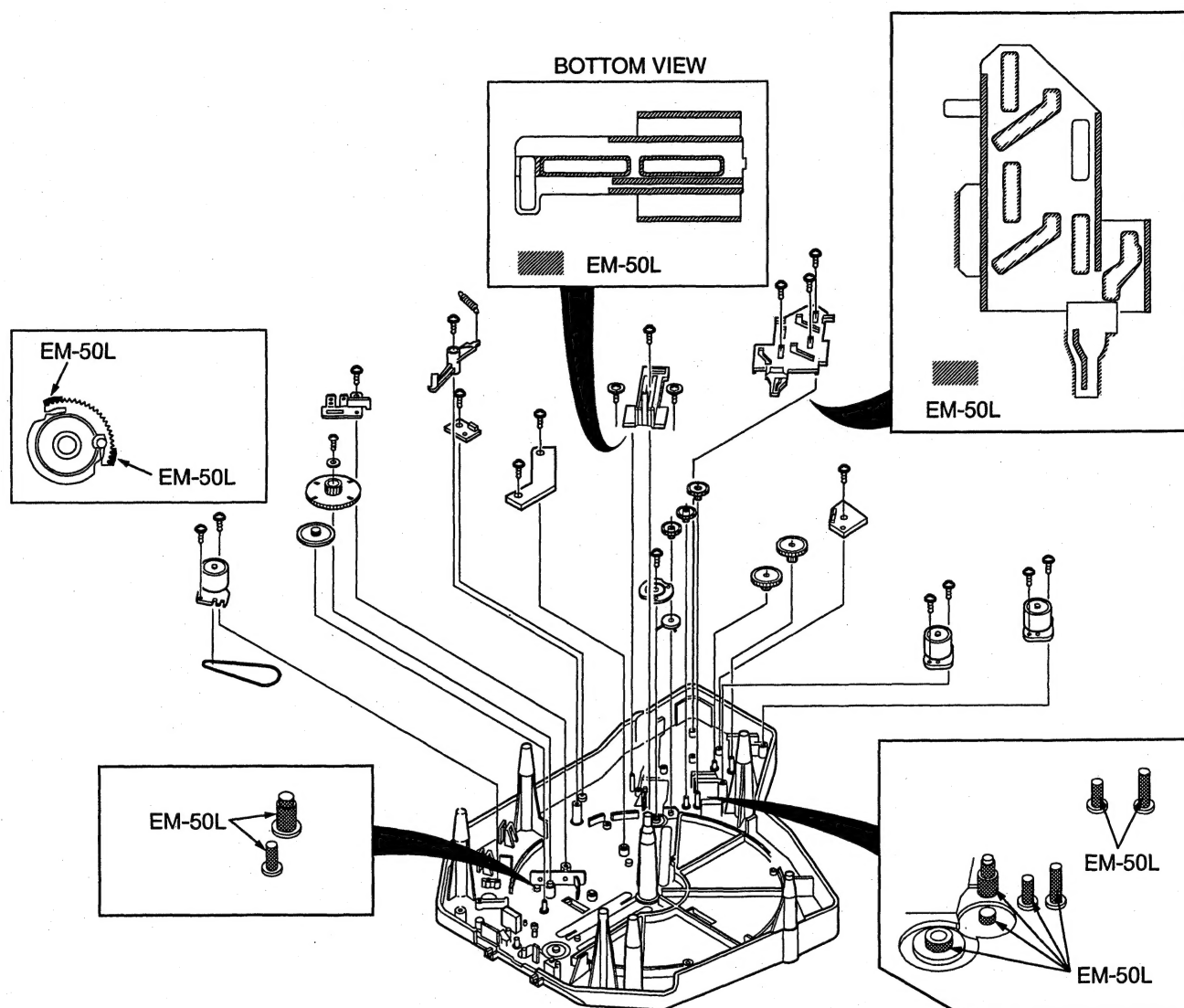
- (3) Align the turntable so that rib (A) of the base chassis is visible between disc indicators 20 and 21 on the turntable. (3)
- (4) Then insert the turntable.



REMOVAL AND INSTALLATION

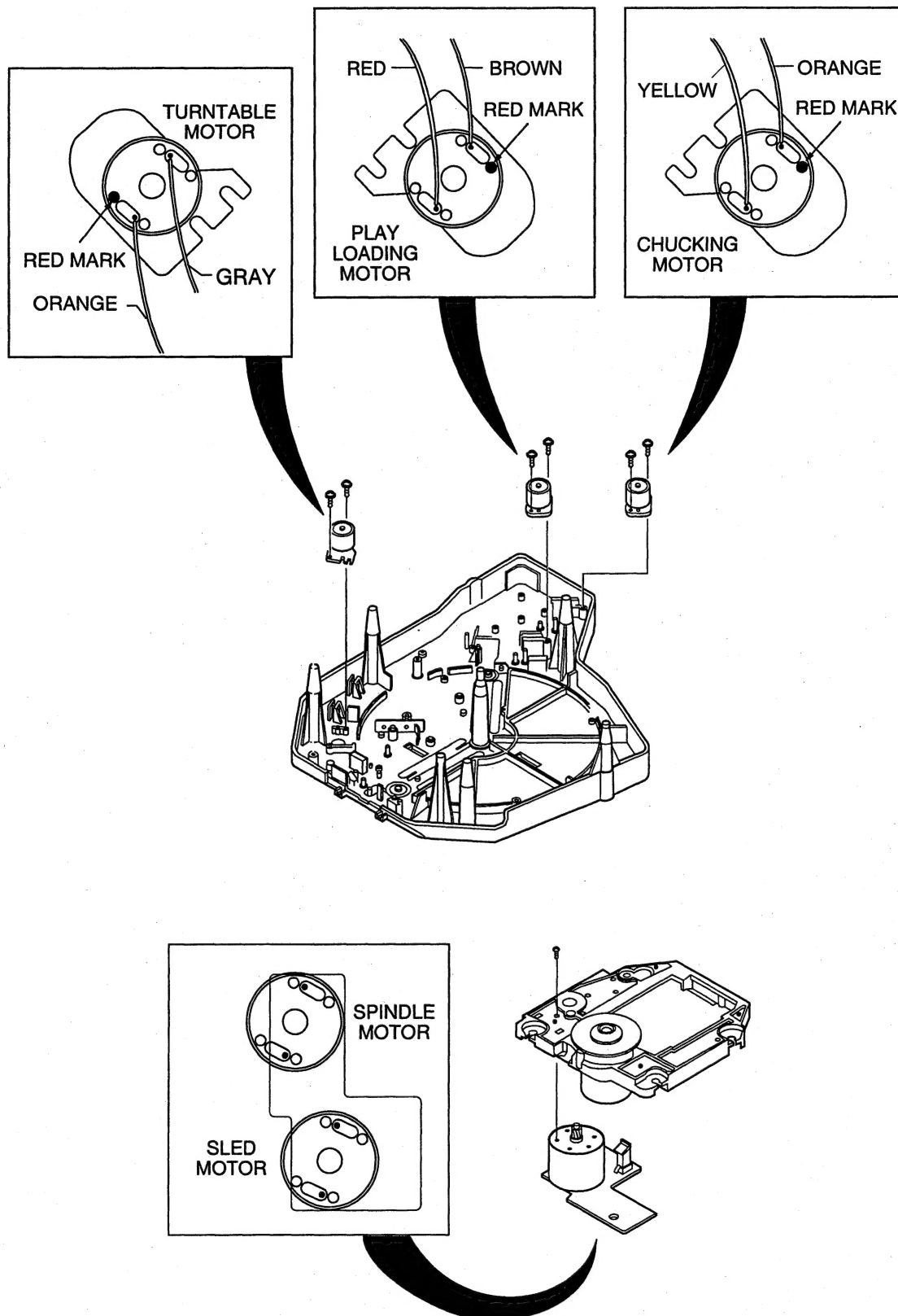
h. MOTOR & LOADING GEAR

- Apply MC-grease "EM-50L" to the places indicated in the diagram.



REMOVAL AND INSTALLATION

I. REPLACEMENT OF MOTOR (CD CHANGER MECHANISM)

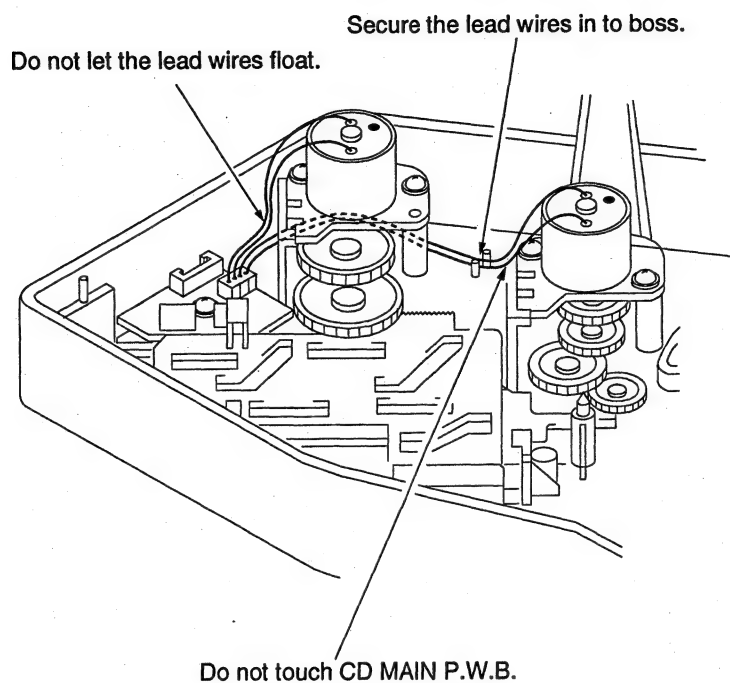


REMOVAL AND INSTALLATION

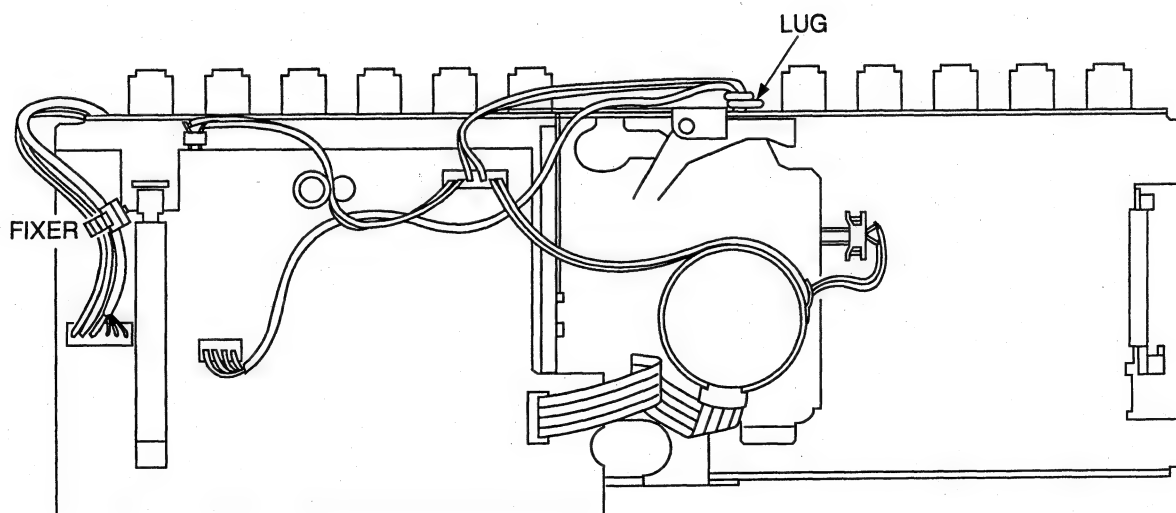
j. WIRING LAYOUT

- All wiring should be returned to the original position after work is completed.

(a) PLAY LOADING & CHUCKING MOTOR

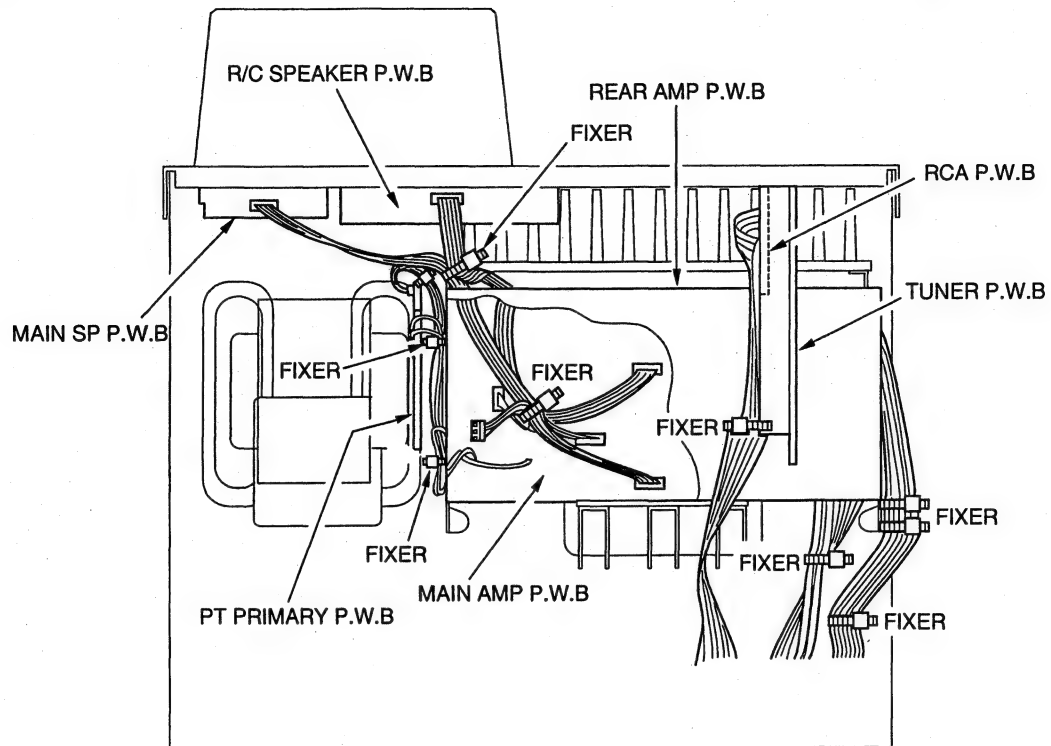


(b) TAPE MECHANISM

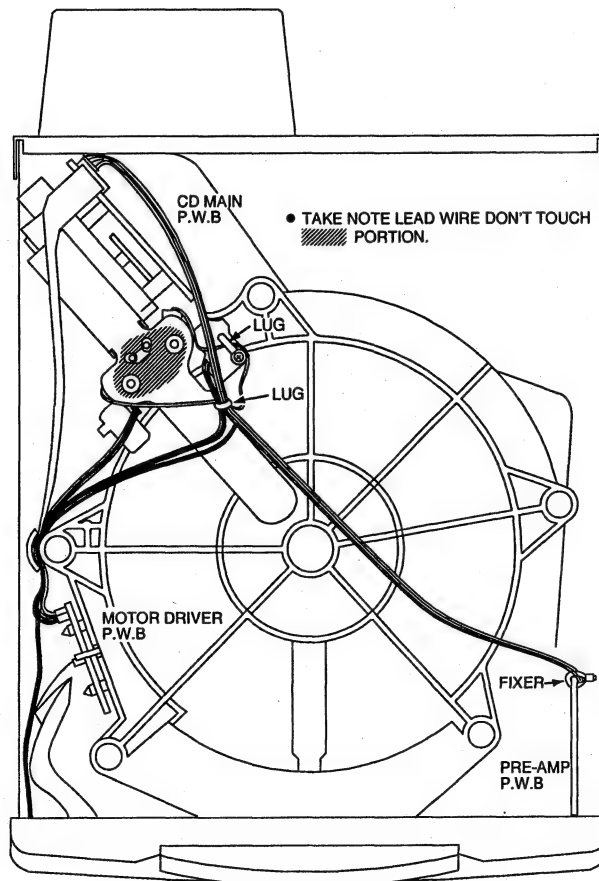


REMOVAL AND INSTALLATION

(c) POWER AMP



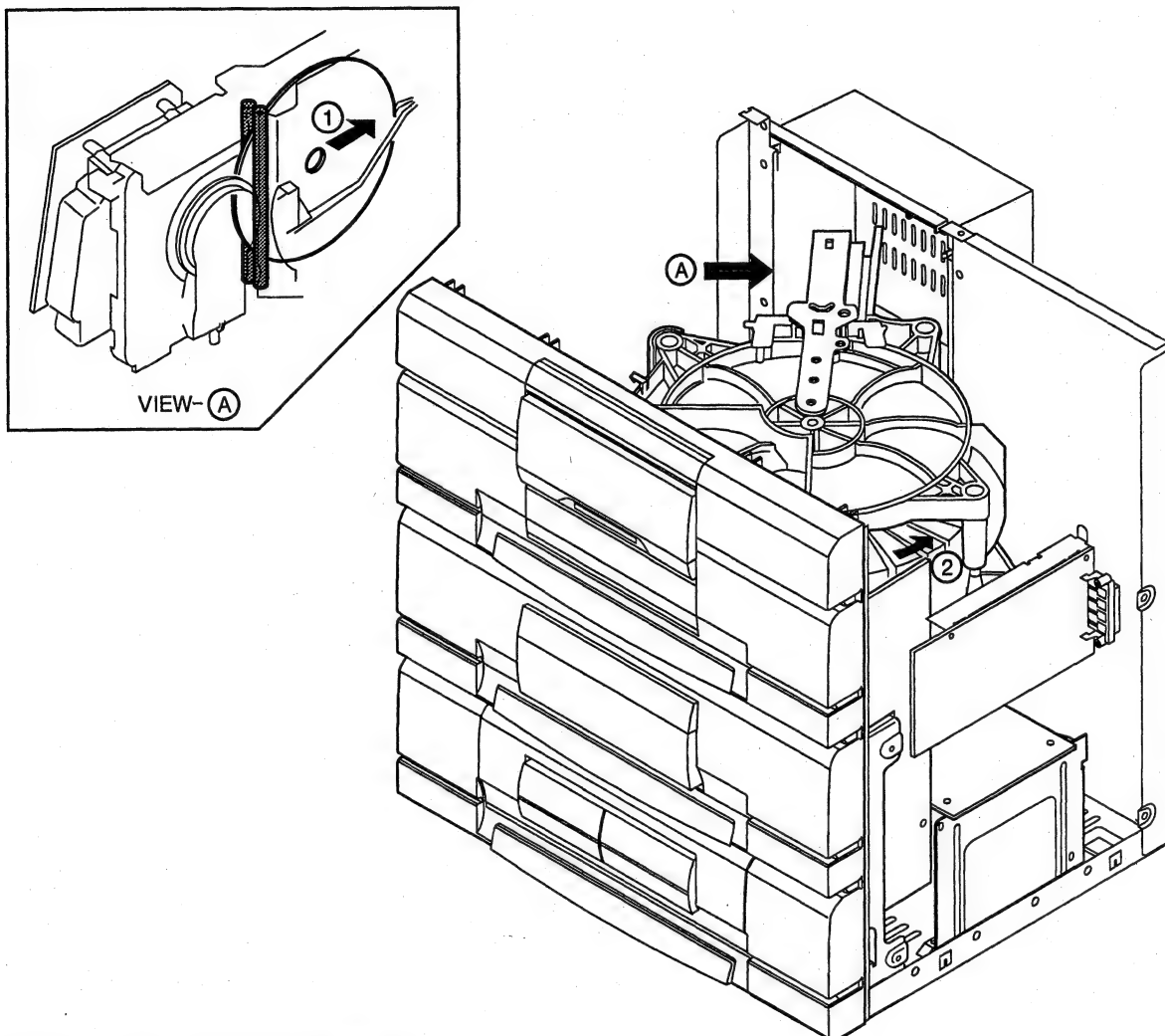
(d) CD CHANGER MECHANISM



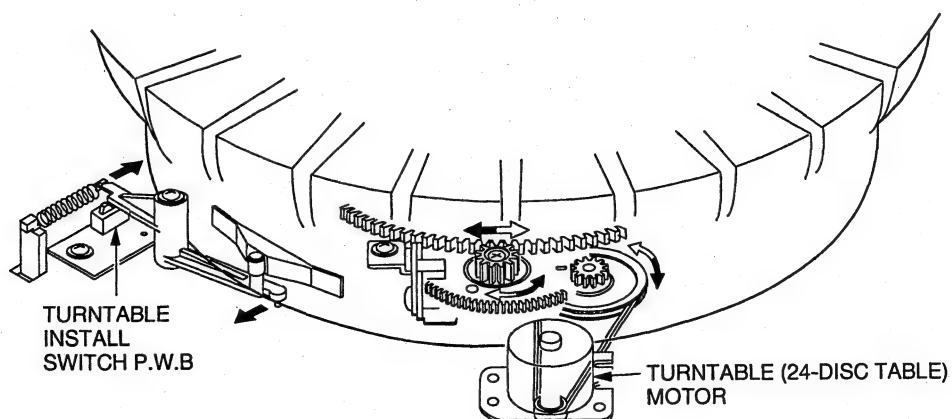
REMOVAL AND INSTALLATION

k. REMOVING CDS FROM 24-DISC TABLE (TURNTABLE)

- If the CDs can not be removed.
 - (1) Check the disc position.
 - (2) If the disc is stopped at position (①), push gently on the disc hole with your fingertip.



- DIAGRAM OF RELATIONSHIP BETWEEN TURNTABLE MOTOR AND GEAR



FLOW CHART OF OPERATION

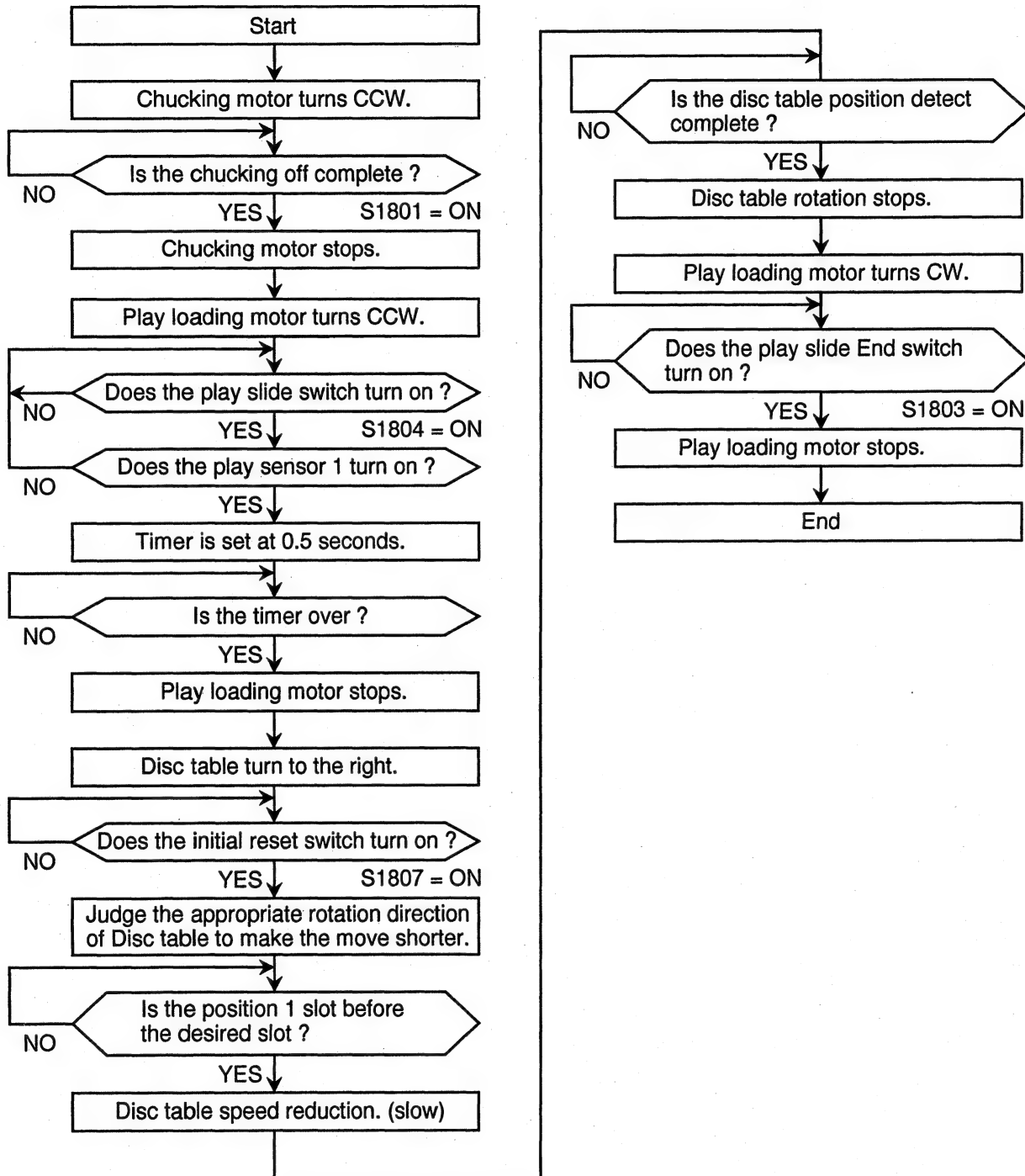
24-DISC Changer Mechanism operation flow chart with Micro processor.

Note:

CW: Clock wise

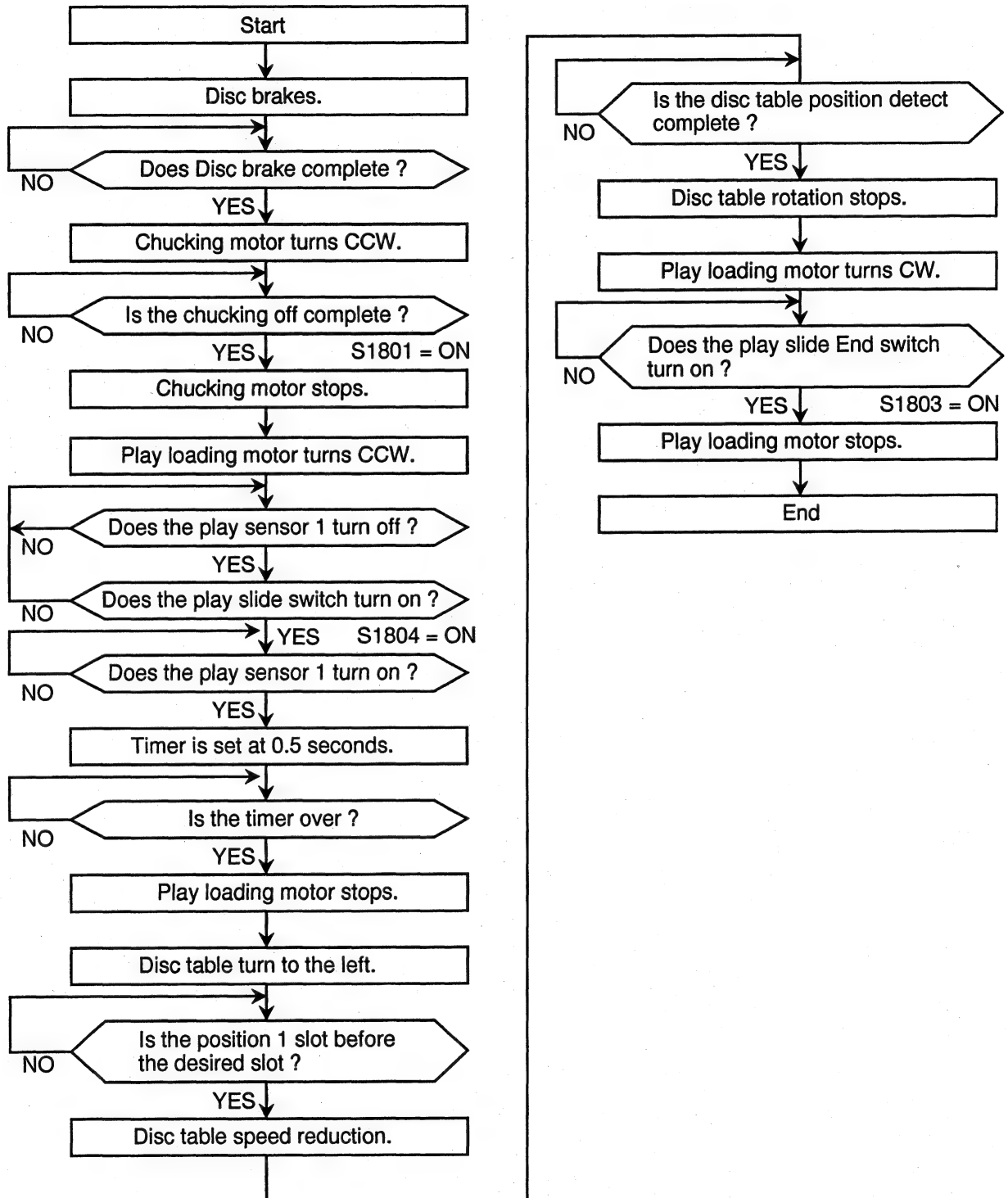
CCW: Counter clock wise

1. Initial operation when power on



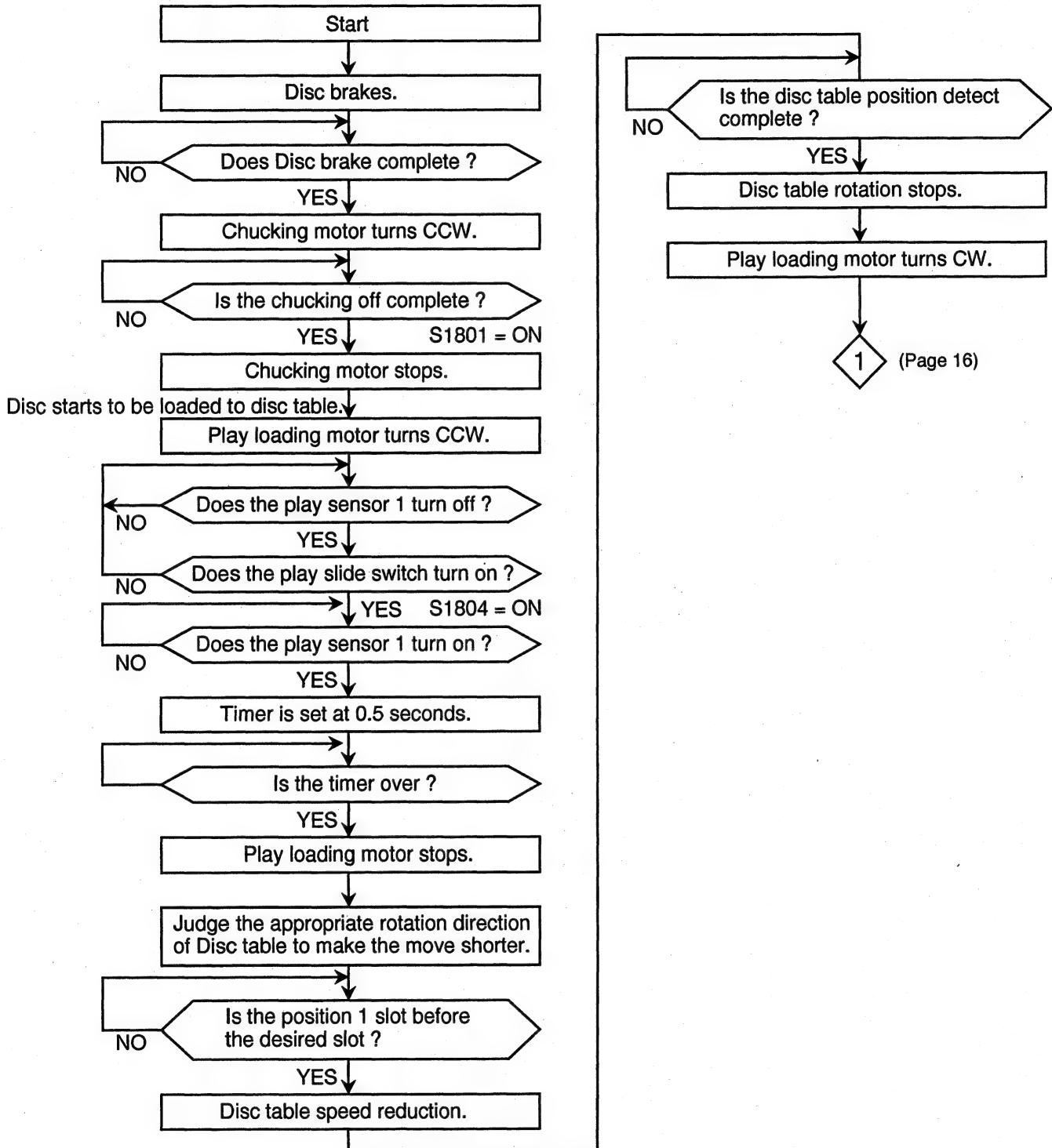
FLOW CHART OF OPERATION

2. Ejecting of Disc in play

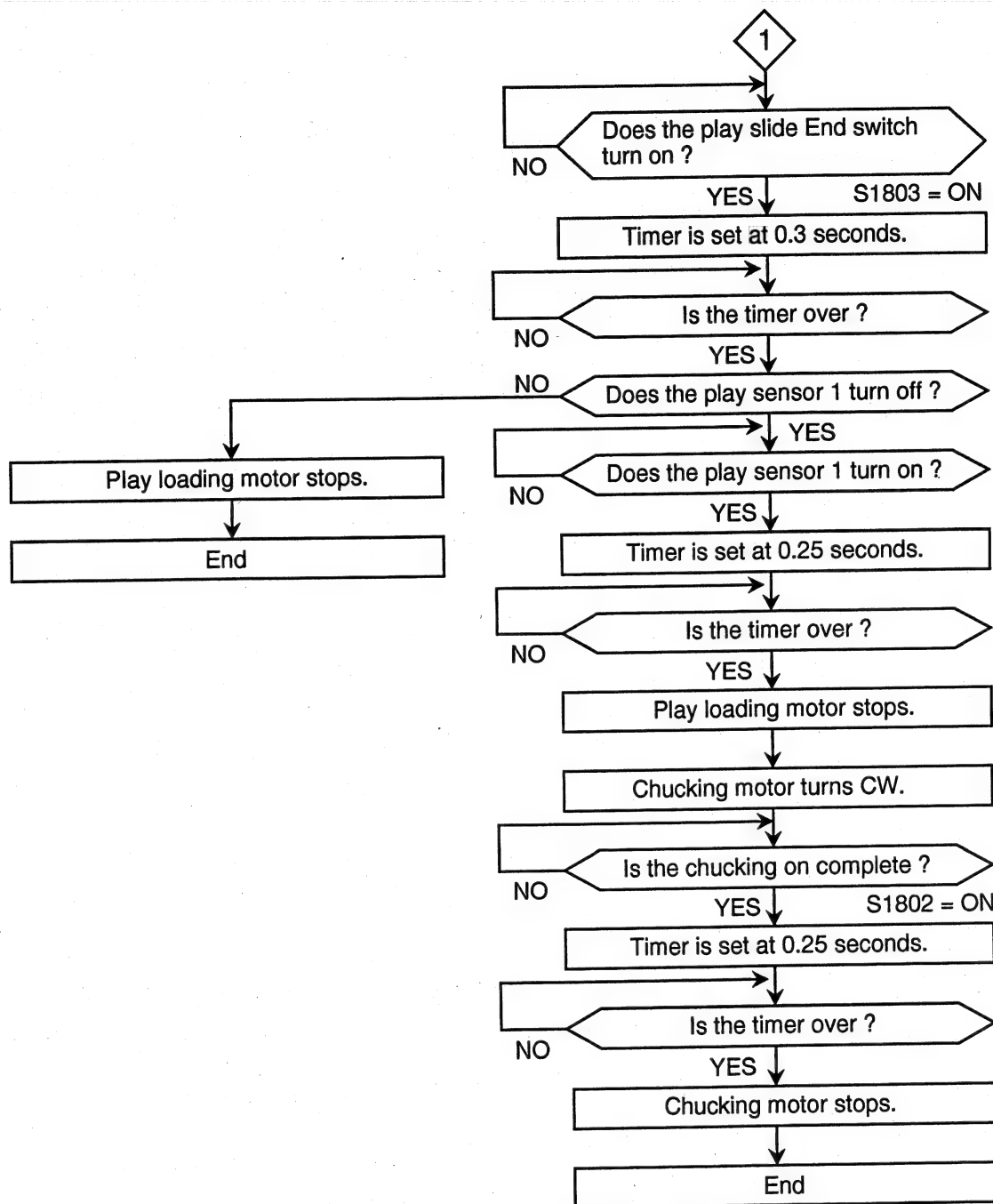


FLOW CHART OF OPERATION

3. Change of Disc in play

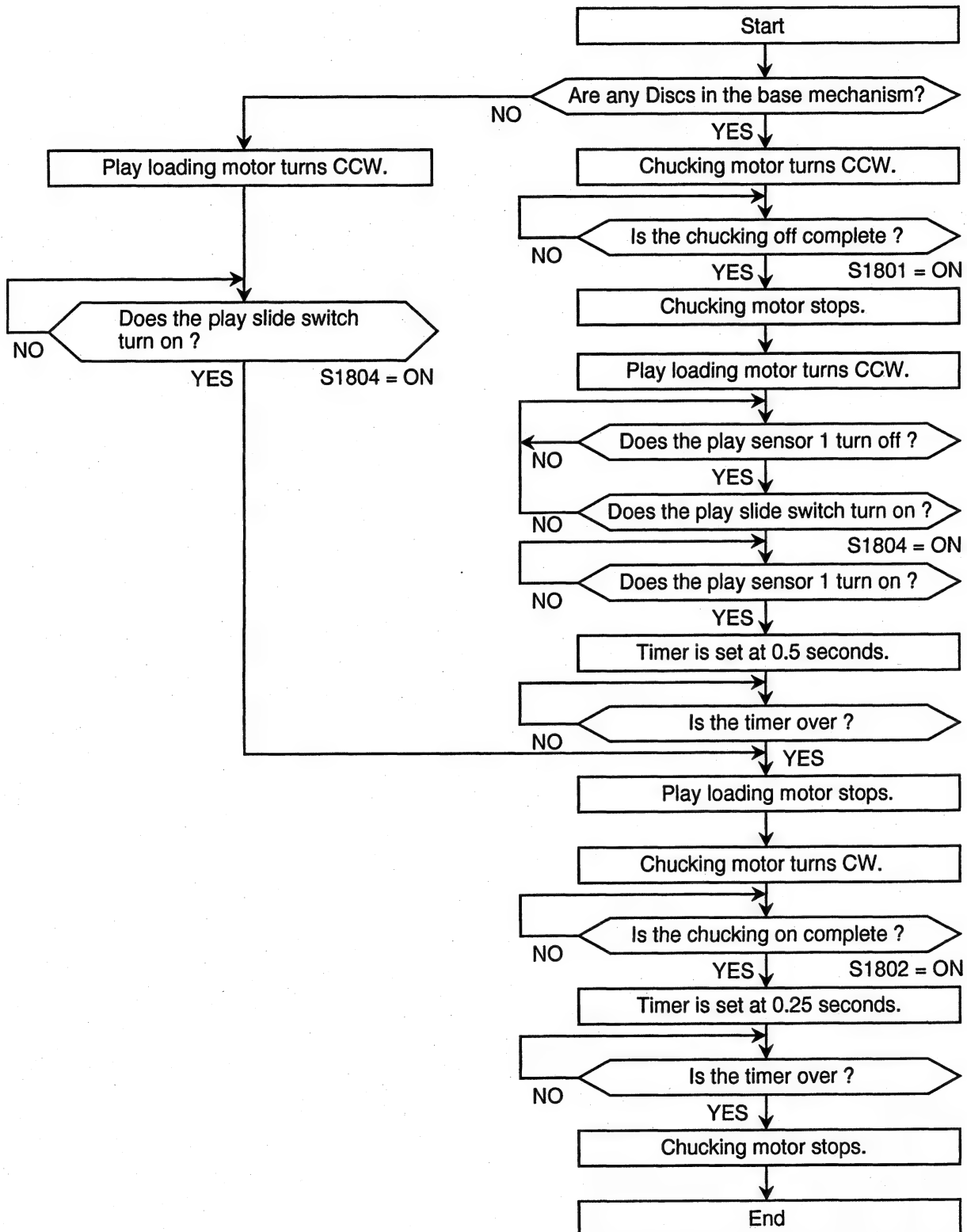


FLOW CHART OF OPERATION



FLOW CHART OF OPERATION

4. Power off process



SERVICE MODE (CD)

Specifications

The service mode uses a special program in the built-in microprocessor to test the unit's operation, list errors in memory, enter adjustment mode. etc.

To enter any service mode, simultaneously press the STOP and ENTER CATEGORY SUB buttons. The unit enters the service mode entry state. Then press the designated button within 1 second to enter the service mode.

1. Checking the button input signal and FL connections

- Enter this mode by pressing the REPEAT button during the service mode entry state.
- When the unit enters this mode, only the indications corresponding to the buttons listed below illuminate on the display.
- In this mode, each time one of the unit's buttons is pressed, the corresponding indication on the fluorescent display lights or goes out alternately.
- All of the indications on the fluorescent display light by pressing the STOP button.
- To release this mode, press the POWER button to turn the power off.

BUTTON	DISPLAY	BUTTON	DISPLAY
CLEAR	ALL	0 / * 9	10 (disc calender)
REPEAT	REPEAT	1ABC	1 (disc calender)
MEMORY (CD)	PROG.	2DEF	2 (disc calender)
PLAY/PAUSE	A PLAY	3GHI	3 (disc calender)
RANDOM	RANDOM	4JKL	4 (disc calender)
INTRO	INTRO	5MNO	5 (disc calender)
LOAD/UNLOAD	CHANGE	6PQR	6 (disc calender)
SKIP/SEARCH (g)	INDEX	7STU	7 (disc calender)
SKIP/SEARCH (h)	STEP	8VWX	8 (disc calender)
DISC SKIP UP	MIN	9YZ-	9 (disc calender)
DISC SKIP DOWN	SEC		
ENTER CATEGORY MAIN	CATEGORY		
ENTER CATEGORY SUB	SUB		
CATEGORY SELECT MAIN	DISC		
CATEGORY SELECT SUB	TRACK		
DISC CHECK	CONTINUE		
STOP	all light		
POWER	off		

TABLE 1 : Corresponding buttons and displays in the button checking mode

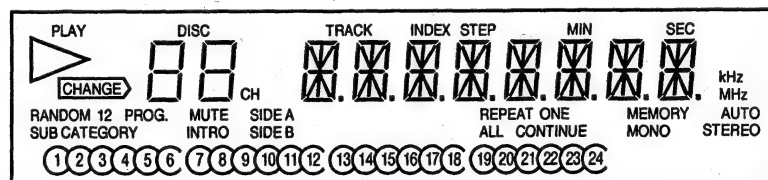


FIGURE 1: FL (Fluorescent Rays Tube Display)

SERVICE MODE (CD)

2. Checking the CD tracking balance

- Enter this mode by pressing the PLAY/PAUSE button during the service mode entry state.
- In this mode, the unit turns the power on automatically.
- In this mode, the unit automatically enters the CD tracking balance adjustment mode after the disc chucking. Then the unit turns the tracking servo on by pressing the PLAY/PAUSE button and enters the play mode. Therefore, you can find the initial position of the pick-up (position of the limit switch) with the display in the play mode.
- In this mode, the unit changes to the CD tracking balance adjustment mode by pressing the MEMORY button during play. Then the unit turns the tracking servo on by pressing the PLAY/PAUSE button and enters the play mode.
- To release this mode, press the POWER button to turn the power off.

3. Checking base (pick-up) mechanism

- Enter this mode by pressing the MEMORY button during the service mode entry state.
- In this mode, when a CD function is activated an indication of the type listed in Table 2, indicating the CD operation, appears in the track and index number section of the fluorescent display instead of the normal indication.
- In this mode, when the CD errors occur, numerals such as those listed in Table 3 appear in the second sections of the fluorescent display. Or indications in the track number and index number sections are fixed. To release the fixing indications mode, press the STOP button in the stop mode.
- To release this mode, press the POWER button to turn the power off.

DISPLAY	OPERATION
0-0	Focus search has been begun
0-1	Adjusting the tracking offset
0-2	Adjusting the focus offset
0-3	Focusing has been begun
0-4	Waiting for focusing
0-5	Focusing
0-6	Spindle kick is in progress
0-7	Deciding disc size
0-8	Adjusting the tracking balance
0-9	Final deciding focus search
0-F	Focus search has been completed (success, failure)
1-0	Spindle braking has begun
1-1	Spindle braking is in progress
1-2	Pick return is in progress
1-F	Pick return has been completed
2-0	Fast forwarding is in progress
2-1	Rewinding is in progress
3-0	Playing has begun
3-1	Playing is in progress
3-2	Playing is in progress (skip return operation)
4-0	TOC reading has been begun
4-1	TOC reading is in progress
4-F	TOC reading has been completed (success, failure)

DISPLAY	OPERATION
5-0	L-point access has been begun
5-1	L-point access (REV64 track jump)
5-2	L-point access (FWD64 track jump)
5-3	L-point access (REV16 track jump)
5-4	L-point access (FWD16 track jump)
5-5	L-point access (REV1 track jump)
5-6	L-point access has been completed
6-0	Pausing has begun
6-3	Pause (REV16 track jump)
6-4	Pause (FWD16 track jump)
6-5	Pause (REV1 track jump)
6-6	Pause (trace)
7-0	Music access has begun
7-1	Music access (high-speed access has begun)
7-2	Music access (high-speed access is in progress)
7-3	Music access (high-speed access has been completed)
7-4	Music access (high-speed access has been completed)
7-5	Music access (high-speed access has been completed)
7-6	Music access (REV64 track jump)
7-7	Music access (FWD64 track jump)
7-8	Music access (REV16 track jump)
7-9	Music access (FWD16 track jump)
7-A	Music access (REV1 track jump)
7-b	Music access has been completed

DISPLAY: Track No. and Index No.

TABLE 2: Displays during the CD operation mode (Track + Index No. section)

DISC No.	STATE OF CD ERROR
0	Good
1	Focusing is not possible in focus search.
2	The subcode is not input during disc startup.
3	TOC cannot be read.
4	The focus was lost while the servo was on (during playing, etc.).
5	The subcode is not input while the servo is on (during playing, etc.).

TABLE 3: Displays of CD errors (Disc No. section)

SERVICE MODE (CD)

4. Mechanism error display

If an error (the indication "M-Error" appears in the scroll display) occurs with the mechanism during operation, this unit stores information on the unit's EEPROM and then displays that information when the unit is serviced.

- Enter this mode by pressing the 1ABC button during the service mode entry state.
- One of the following codes is displayed in the track No. and index No. sections of the display.
- To release this mode, turn the power off.

OPERATION	DISPLAY	ERROR
Chucking on	8 2	Chuck on complete switch (S1802)
Chucking off	9 2	Chuck off complete switch (S1801)
Disc moves to the base mechanism	A 2	Chuck off complete switch (S1801)
	A 8	Moving a disc to the base mechanism has been failed (Sensor 1, S1803)
Disc loads in the turntable	B 4	Moving a disc to the turntable has been failed (Sensor 1, S1804)
	B 6	Slide switch (play side) (S1804)
Turntable rotates (to the base mechanism)	C 2	Slide switch (play side) (S1804)
	C 4	Turntable position detection sensor
Turntable rotates (to front)	D 2	Slide switch (play side) (S1804)
	D 4	Turntable position detection sensor
	D 8	Slide switch (play side) (S1803)
Disc ejected	E 2	Disc eject complete switch (S1806)
Disc close	F 2	Disc close complete switch (S1805)
Disc checking	10 2	Chuck off complete switch (S1801)
	10 8	Slide switch (play side) (S1803)
Mechanism initialization	11 2	Chuck off complete switch (S1801)
	11 5	Moving a disc to the turntable has been failed (Sensor 1, S1804)
	11 8	Disc close complete switch (S1805)
	11 A	Initial reset switch (S1807)
	11 D	Turntable position detection sensor
	11 10	Slide switch (play side) (S1803)

TABLE 4: Error indications during the mechanism mode (Track + Index No. part)

5. Mechanism shipping

- Enter this mode by pressing the 0_/ *9 button during the service mode entry state.
- In this mode, the mechanism is moved to the shipping position of the mechanism and the turntable can be rotated by hand to remove the CDs manually in the servicing.
- In this mode, the unit does not operate normally. To resume normal operation, unplug the AC cord and reinsert it.

6. EEPROM Clear

- In the service mode entry state, press the CLEAR button. This clears the contents of the EEPROM and exits the service mode.

SERVICE MODE (TUNER & AMPLIFIER)

Specifications

To enter any service mode, simultaneously press the STOP and ENTER CATEGORY SUB buttons. The unit enters the service mode entry state. Then press the designated button within 1 second to enter the service mode.

1. Checking connections (button & display)

- Enter this mode by pressing the REPEAT button during the service mode entry state.
- When the unit enters this mode, only the indications corresponding to the buttons listed below illuminate on the display.
- In this mode, each time one of the unit's buttons is pressed, the corresponding indication on the fluorescent display lights or goes out alternately.
- To release this mode, press the POWER button to turn the power off.

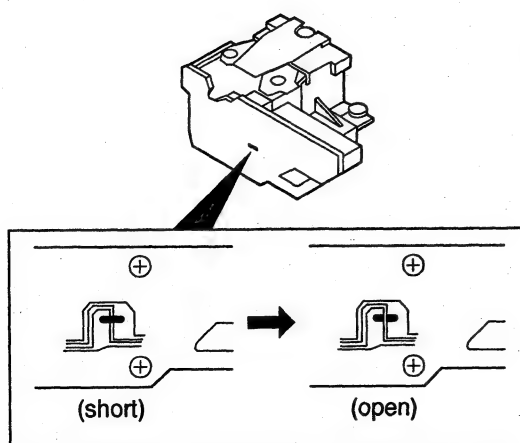
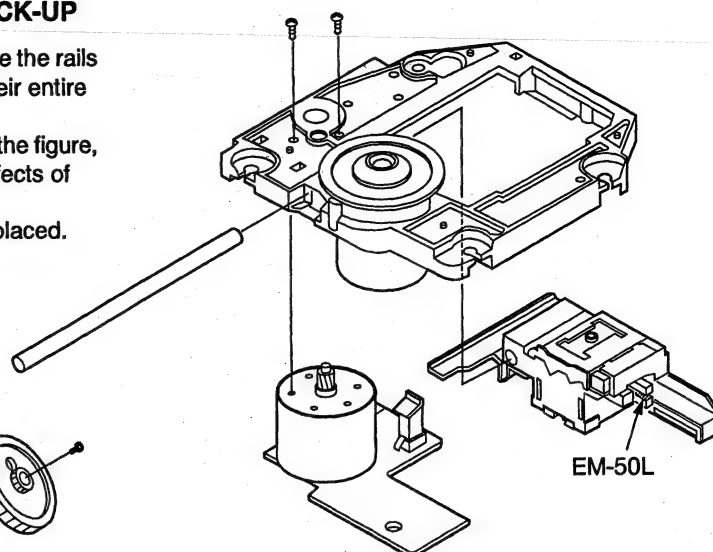
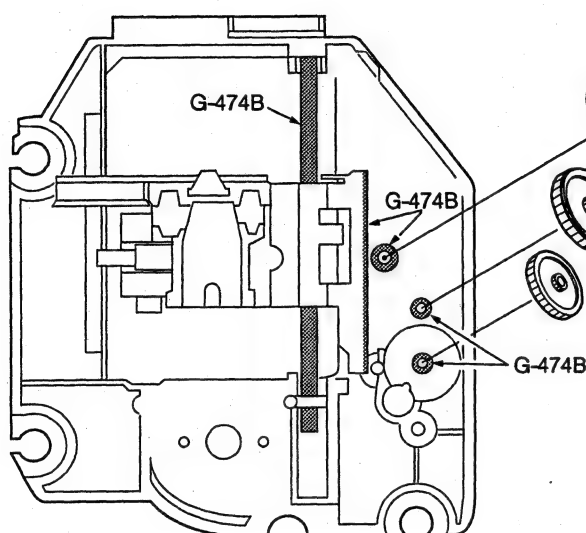
BUTTON	DISPLAY
CD	1 (tens digit of "TRACK" section)
TAPE	2 (units digit of "TRACK" section)
TUNER	3 (tens digit of "INDEX" section)
PHONO	4 (units digit of "INDEX" section)
VIDEO	5 (tens digit of "MIN" section)
MEMORY (tuner)	MEMORY
FM MODE	STEREO
BAND	CH
TUNING UP	kHz
TUNING DOWN	MHz
PRESET UP	AUTO
PRESET DOWN	MONO

TABLE 1 : Corresponding buttons and displays in the button checking mode

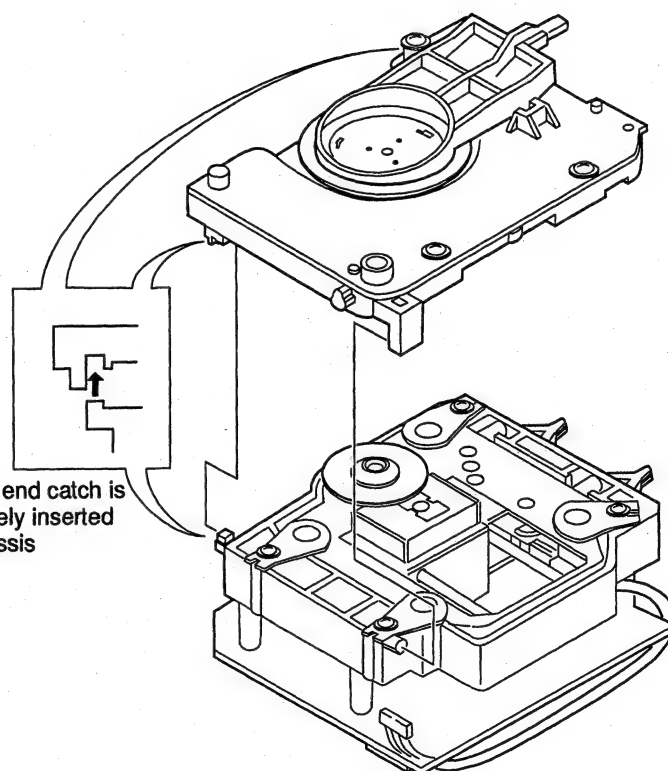
CD PLAYER ADJUSTMENT

a. REPLACEMENT AND LUBRICATION OF THE PICK-UP

- (1) If the pick-up is reconditioned or replaced, be sure to wipe the rails clean and also apply a coating of FLOIL (G-474B) to their entire circumference and entire length.
- (2) The pick-up P.C.Board pattern is "shorted", as shown in the figure, so that the new pick-up will not be susceptible to the effects of static.
- (3) Set the pattern to "open" after the pick-up has been replaced.



Confirm end catch is completely inserted into chassis



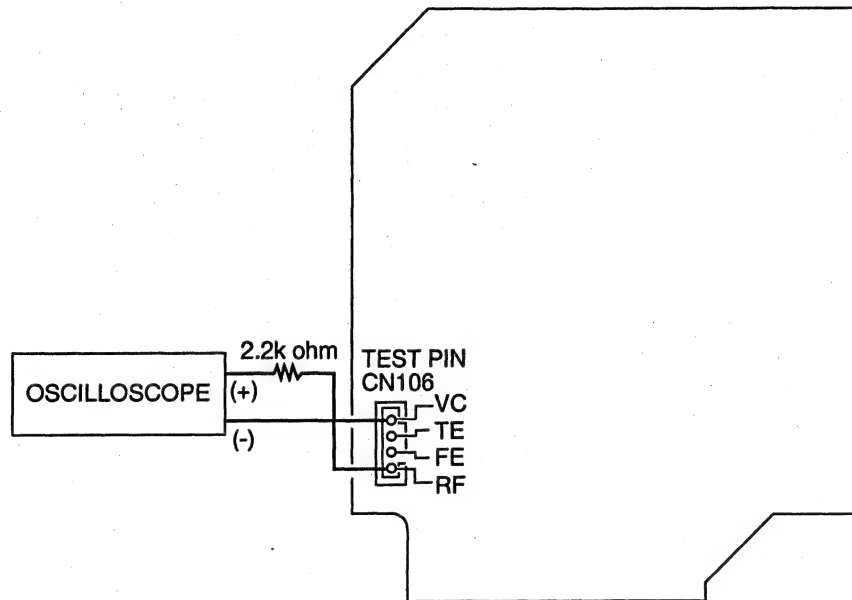
CD PLAYER ADJUSTMENT

b. PREPARATIONS

(a) Measuring instruments, tools

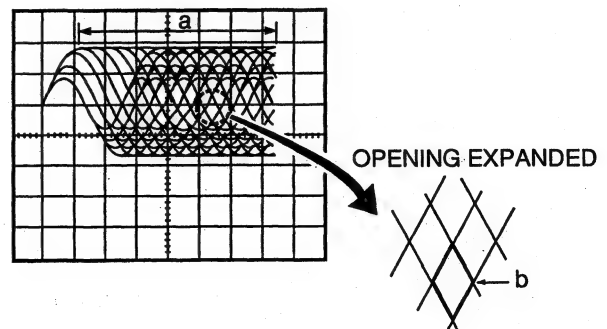
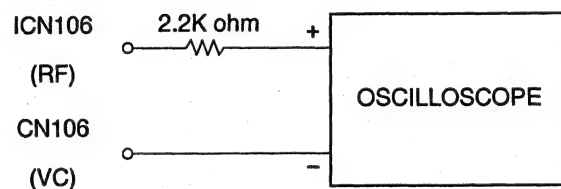
- (1) Test disc.: YEDS 18 (SONY) or etc.
- (2) Oscilloscope : SS5711 (10 MHz or dual-phenomenon)
or Memoryscope : DSS6521 (Storagescope)
- (3) Resistor, Carbon 2.2 K ohm, 1/4W

c. PARTS LOCATION



d. CHECKING THE EYE PATTERN

- (1) Switch ON the power.
- (2) Connect an oscilloscope to CN106 (RF) and CN106 (VC).
- (3) Load the test disc.
- (4) PLAY switch push ON.
- (5) Check to be sure that the "eye" pattern is at the center of waveform and that the diamond shape is clearly defined.
- (6) Press the STOP button.
- (7) Switch OFF the power.



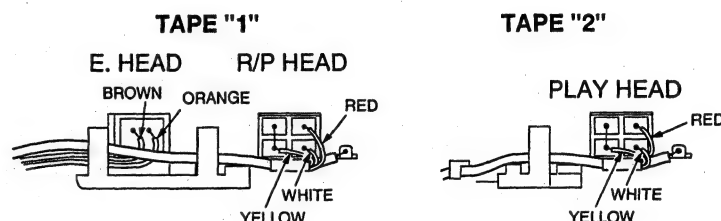
TAPE DECK ADJUSTMENT

Adjustment Item	Test Tape	Measuring Instrument	Output connection	Adjust location	Adjust value	Note
(a) HEAD AZIMUTH TAPE "1"	VTT738 etc. (10 kHz)	AC-voltmeter	SPEAKER TERMINAL or TAPE OUT	HEAD AZIMUTH SCREW	Max.	—
(b) HEAD AZIMUTH TAPE "2"	VTT738 etc. (10 kHz)	AC-voltmeter	SPEAKER TERMINAL or TAPE OUT	HEAD AZIMUTH SCREW	Max.	—
(c) MOTOR SPEED (NORMAL)	MTT-111 (3,000 Hz)	FREQUENCY COUNTER	SPEAKER TERMINAL or TAPE OUT	VR301	3,000 Hz	CN305 TERMINALS "OPEN"
(d) MOTOR SPEED (HIGH)	TCW-211 (1,500 Hz)	FREQUENCY COUNTER	SPEAKER TERMINAL or TAPE OUT	Checking	3,000 Hz	CN305 TERMINALS "SHORT"

a. HEAD REPLACEMENT AND AZIMUTH ADJUSTMENT

(a) Head replacement

- (1) After replacement, demagnetize the heads by using a degausser.
- (2) Be sure to clean the heads before attempting to make any adjustments.
- (3) Be sure both channels (1 and 2) are the same level (Using a dual-channel oscilloscope).
- (4) All wiring should be returned to the original position after work is completed.



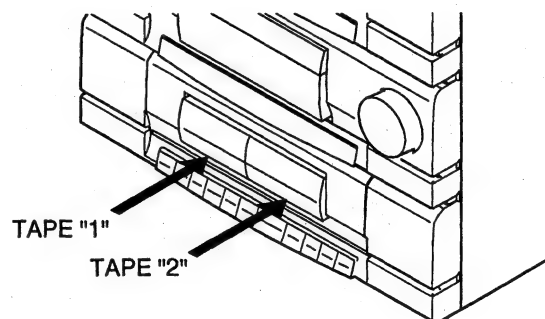
(b) Head azimuth

• TAPE "1"

- (1) Load a test tape (VTT-738, etc.: 10 kHz) for azimuth adjustment.
- (2) Press the PLAY button.
- (3) Use a flat-tip (-) screwdriver to turn the screw for normal azimuth adjustment so that the left and right outputs are maximized at the same phase during playback.
- (4) Press the STOP button.

• TAPE "2"

- (1) Load a test tape for azimuth adjustment.
- (2) Press the PLAY button.
- (3) Azimuth screw adjustment.
- (4) Press the STOP button.

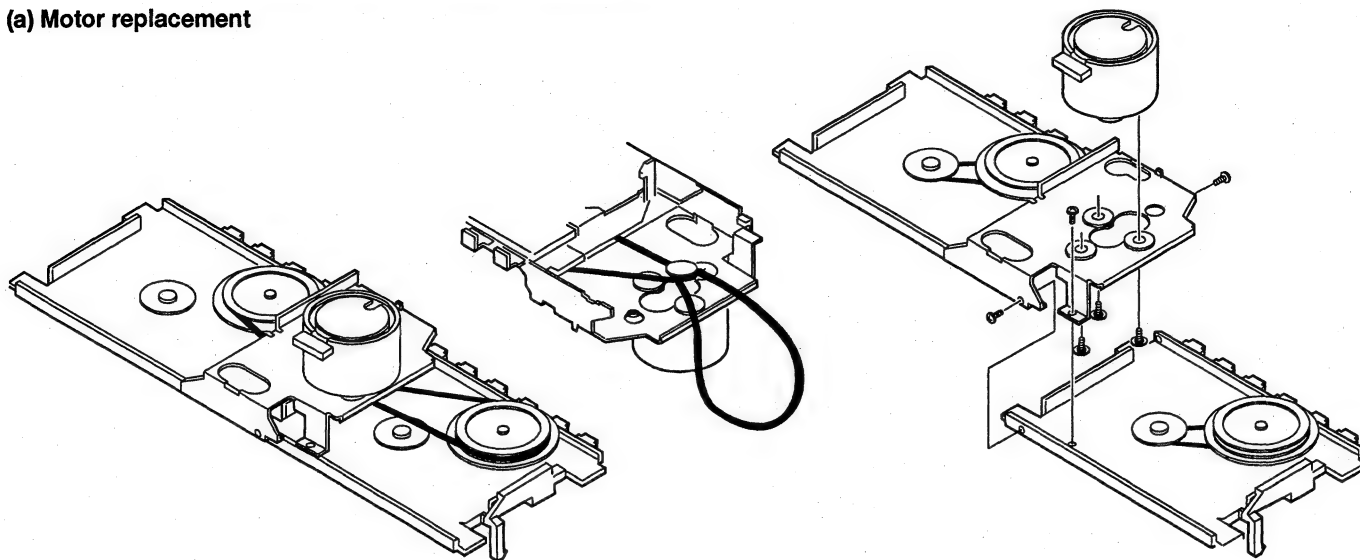


- After making the adjustment, secure the azimuth adjustment screw by applying screw lock (TB-1401B).

TAPE DECK ADJUSTMENT

b. MOTOR REPLACEMENT AND SPEED ADJUSTMENT

(a) Motor replacement



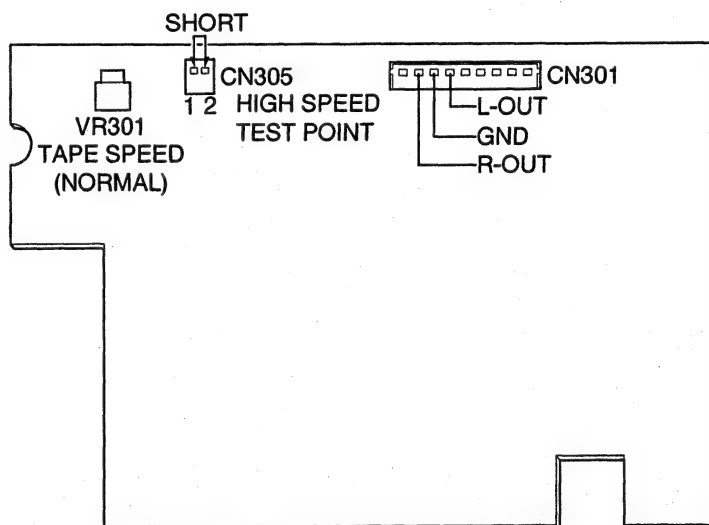
(b) Motor speed

• NORMAL SPEED

- (1) Insert the test tape (MTT-111, etc. 3,000 Hz) into Tape "1".
- (2) Press Tape "1's" PLAY button.
- (3) Adjustment VR301 so that the frequency counter shows a reading of 3,000 Hz.
- (4) Press Tape "1's" STOP button.

• HIGH SPEED

- (1) Insert the test tape (TCW-211, etc. 1,500 Hz optional) into Tape "1".
- (2) Press Tape "1's" PLAY button.
- (3) Set to the high-speed condition.
- (4) Short-circuit test points CN305 terminals.
- (5) Checking the frequency counter reading is 3,000 Hz.
- (6) Press Tape "1's" STOP button.
- (7) After the completion of the adjustment, remove the short-circuit between CN305 terminals.



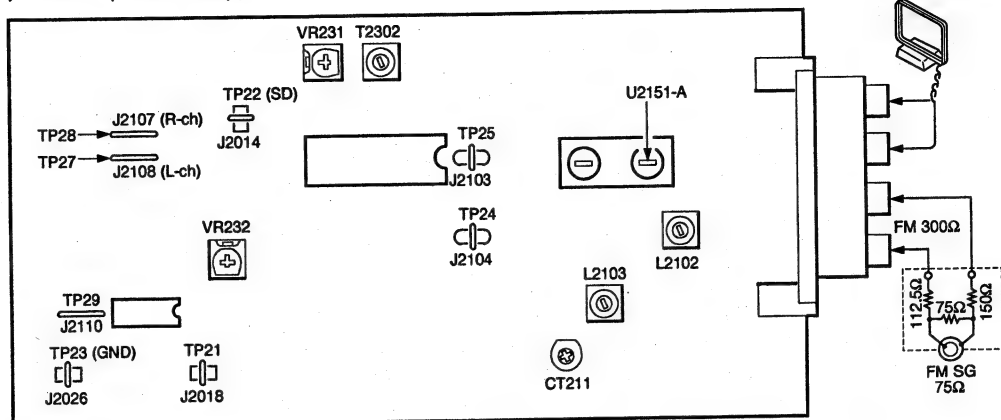
c. CHECKING THE MECHANISM TORQUES

- Clean the head, capstan and pinch roller before making any measurement.

Measurement	Take-up torque	Back tension	Tape tension
Cassette for measurement	PLAY: TW-2111A F.FWD/REW: TW-2231	PLAY: TW-2111A	Drive-power cassette TW-2412
PLAY	30 ~ 60 gr.cm	1.5 ~ 4.5 gr.cm	60 gr or more
F.FWD/REW	55 ~ 120 gr.cm	—	—

TUNER ADJUSTMENT

- Use a plastic screw driver for adjustments.
- Speaker impedance : 8 ohm
- Standard Output : 500 mW
- FM MODE switch : STEREO
- TUNING FM : 87.9 - 107.9 MHz (200 kHz step)
- AM : 520 - 1,710 kHz (10 kHz step)



SG RF Level : 75 ohm Open Voltage dBμV
 Antenna : 300 ohm balanced (-6dB PAD), Modulation : 1kHz,
 Dev. : ± 75kHz (MONO) ± 67.5kHz (MAIN) ± 6.75kHz (PILOT)

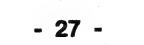
a. ADJUSTMENT OF FM BAND

Step	Adjusting Circuit	Connections		SG Frequency	Position of tuning dial	Adjustment	VTVM Oscilloscope or DC voltmeter
		Input	Output				
1	Tuning coverage	—	Connect to Digital DC voltmeter TP21 (H), TP23 (G)	87.9MHz	Low end	—	(1.0 ~ 1.5V) (less than 8.5V)
				107.9MHz	High end	—	
2	Tracking	FM Antenna	FM Antenna L-ch: TP27 (H), TP29 (G) R-ch: TP28 (H), TP29 (G)	90.1MHz	90.1MHz	L2102 L2103	Max.
			FM Antenna TP27 (H), TP29 (G)	106.1MHz	106.1MHz	CT211	
3	0v	FM Antenna (SG = 72 dBμV)	Connect to Digital DC voltmeter TP24 (H), TP25 (G)	98.1MHz	98.1MHz	T2302	0 ± 0.05V
4	SD (Auto Stop)	FM Antenna (SG = 34 dBμV)	Connect to Digital DC voltmeter TP22 (H), TP23 (G)	98.1MHz	98.1MHz	VR232	Low Level
5	Separation	FM Antenna (SG = 72 dBμV)	FM Antenna L-ch: TP27 (H), or R-ch: TP28 (H), TP29 (G)	98.1MHz	98.1MHz	—	Max.
6	Stereo Sensitivity	FM Antenna	—	98.1MHz	98.1MHz	—	Max.

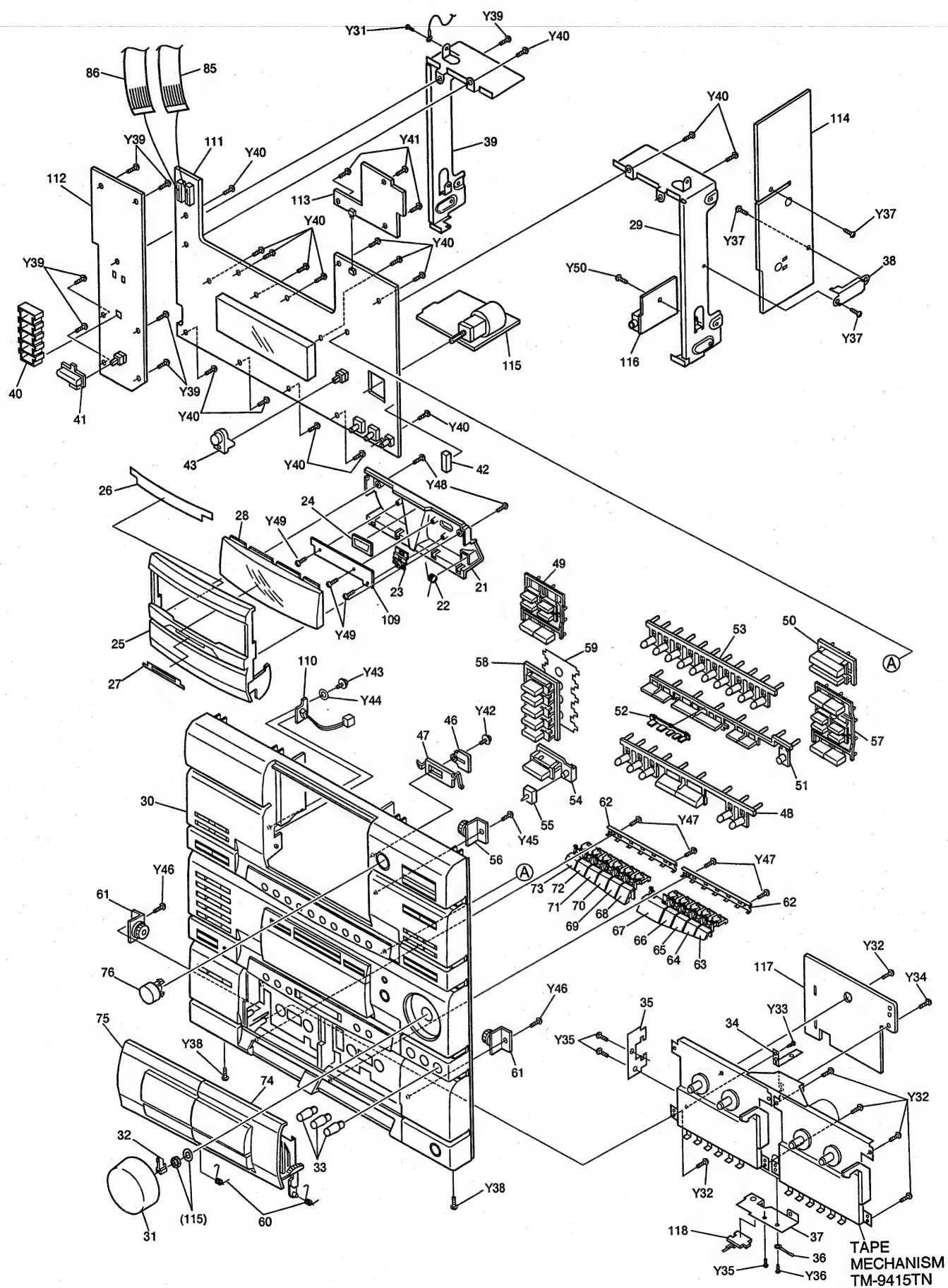
SG Modulation : 1,000Hz, 30%
 IRE Loop Antenna

b. ADJUSTMENT OF AM BAND

Step	Adjusting Circuit	Connections		SG Frequency	Position of tuning dial	Adjustment	VTVM Oscilloscope or DC voltmeter
		Input	Output				
1	Tuning coverage	—	Connect to Digital DC voltmeter TP21 (H), TP23 (G)	520kHz	Low end	—	(1.0 ~ 1.4V) (less than 8.5V)
				1710kHz	High end	—	
2	Tracking	Connect AM SG to Test Loop	Connect to Digital DC voltmeter TP27 (H) or TP28 (H), TP29 (G)	600kHz	600kHz	U2151-A	Max.
				1400kHz	1400kHz	—	—
3	SD (Auto Stop)	Connect AM SG to Test Loop (SG = 80 dBμV)	Connect to Digital DC voltmeter TP22 (H), TP23 (G)	1000kHz	1000kHz	VR231	Low Level

[illegible]

EXPLODED VIEW (CABINET & CHASSIS 2/2)



PARTS LIST

PRODUCT SAFETY NOTICE

Each precaution in this manual should be followed during servicing. Components identified with the IEC symbol Δ in the parts list and the schematic diagram designated components in which safety can be of special significance. When replacing a component identified by Δ , use only the replacement parts designated, or parts with the same ratings of resistance, wattage or voltage that are designated in the parts list in this manual. Leakage-current or resistance measurements must be made to determine that exposed parts are acceptably insulated from the supply circuit before returning the product to the customer.

CAUTION: Regular type resistors and capacitors are not listed. To know those values, refer to the schematic diagram.
Regular type resistors are less than 1/4 W carbon type and 0 ohm chip resistors.
Regular type capacitors are less than 50 V and less than 1000 μ F type of Ceramic type and Electrical type.

N.S.P: Not available as service parts.

PACKING & ACCESSORIES

Ref. No.	Part No.	Description
	614 281 8121	CARTON CASE
	645 017 2410	POLY SHEET-1800X560MM NC, SET
	614 281 8145	CUSHION TOP
	614 281 8152	CUSHION BOTTOM
	614 281 8213	OWNERS MANUAL
	614 186 0725	NOTICE, UL
	614 281 8220	OWNERS MANUAL SHEET
	614 189 3624	CAUTION LABEL, CABINET
	614 271 6014	LABEL, CAUTION
	614 277 0689	CUSHION, PAD, SHIPPING BOARD
	645 005 1227	ASSY, ANTENNA, LOOP
	614 023 7481	ANT, FM
	645 017 5251	REMOCON, RB-REM-9625/SS.SP

Ref. No.	Part No.	Description
38	614 266 6531	HOLDER, PWB, PRE PWB
39	614 281 7797	MOUNTING, BRACKET, FRONT-CABINET(L)
40	614 283 9188	REFLECTOR, FUNCTION
41	614 281 7445	BUTTON, DUB SPEED
42	614 286 9819	SPACER
43	614 281 7438	BUTTON, DYNAMIC BASS
46	614 286 7389	MOUNTING, BRACKET, CD DOOR
47	614 281 7865	SLIDE, CD DOOR
48	614 281 7421	BUTTON, TUNING
49	614 281 7469	BUTTON, MEMORY/CATEGORY
50	614 281 7384	BUTTON, CD PLAY/STOP
51	614 281 7414	BUTTON, SURROUND FUNCTION
52	614 281 7636	DEC, WINDOW, SURROUND FUNCTION
53	614 281 7407	BUTTON, DISC SELECT
54	614 281 7391	BUTTON, POWER
55	614 281 7643	DEC, WINDOW, POWER
56	614 270 8309	ASSY, GEAR, CD DOOR
57	614 281 7452	BUTTON, DISC CHECK/DISC SKIP
58	614 281 7377	BUTTON, FUNCTION
59	614 286 0526	DEC, SHEET, FUNCTION
60	614 218 0051	SPRING, WIRE, LID, CASSETTE
61	614 270 8309	ASSY, GEAR, LID, CASSETTE
62	614 273 0041	BRACKET-M, MECHA BUTTON
63	614 283 7344	KNOB, LEVER, DECK PAUSE (DECK 2)
64	614 283 7337	KNOB, LEVER, DECK STOP/EJECT (DECK 2)
65	614 283 7320	KNOB, LEVER, DECK FFWD (DECK 2)
66	614 283 7313	KNOB, LEVER, DECK REW (DECK 2)
67	614 283 7306	KNOB, LEVER, DECK PLAY (DECK 2)
68	614 285 7977	KNOB, LEVER, DECK PAUSE (DECK 1)
69	614 285 7960	KNOB, LEVER, DECK STOP/EJECT (DECK 1)
70	614 285 7953	KNOB, LEVER, DECK FFWD (DECK 1)
71	614 285 7946	KNOB, LEVER, DECK REW (DECK 1)
72	614 285 7939	KNOB, LEVER, DECK PLAY (DECK 1)
73	614 285 7922	KNOB, LEVER, DECK REC (DECK 1)
74	614 281 7223	ASSY, LID, CASSETTE (DECK 2)
75	614 281 7216	ASSY, LID, CASSETTE (DECK 1)
76	614 281 7360	BUTTON, DOOR OPEN

CABINET & CHASSIS

Ref. No.	Part No.	Description
1	614 281 7476	CABINET
2	614 224 1264	HANDLE
3	614 283 9720	MOUNTING, BRACKET, PANEL, REAR
4	614 283 9706	COVER, PANEL, REAR
6	614 283 2578	HOLDER PWB, TUNER PWB
7	614 284 4748	MOUNTING, BRACKET, PANEL, REAR
8	614 281 7827	PANEL, REAR
9	614 250 6721	FOOT, REAR STAND
10	614 284 4151	MOUNTING, BRACKET, POWER, PWB PT
11	614 129 1901	FIXER, AC CORD
13	614 281 7490	CABINET, BOTTOM
14	614 266 6524	HOLDER, BRACKET, CHASSIS(R)
15	614 266 6517	HOLDER, BRACKET, CHASSIS(L)
16	614 283 1083	HOLDER PWB, POWER PWB, PROLOGIC PWB
17	614 283 1076	HOLDER PWB, POWER PWB, PROLOGIC PWB
18	614 287 1966	SPACER, CD MECHA
21	614 281 7537	COVER, CD-DOOR
22	614 268 7888	SPRING, WIRE, CD DOOR OPEN
23	614 281 7353	BUTTON, LOAD/UNLOAD
24	614 281 7605	DEC, WINDOW, CD-DOOR
25	614 281 7544	DOOR, CD-DOOR
26	614 286 0519	COVER, CD-DOOR
27	614 281 7612	DEC, WINDOW, CD-DOOR
28	614 281 7599	DEC, WINDOW, CD-DOOR
29	614 281 7803	MOUNTING, BRACKET, FRONT-CABINET(R)
30	614 281 7322	ASSY, PANEL, FRONT
31	614 281 7667	KNOB ROTARY, VOLUME
32	614 281 7629	DEC, WINDOW, VOLUME
33	614 281 7674	KNOB ROTARY, BASS, TRE, BALANCE
34	614 270 8484	SPRING, PLATE, DECK REC
35	614 270 8408	HOLDER, DECK PWB
36	614 129 9136	LUG, DECK MECHA LEAD
37	614 270 8392	HOLDER, DECK PWB

FIXING PARTS

Ref. No.	Part No.	Description
Y01	411 021 6603	SCR S-TPG BIN 3X8, CABINET
Y02	411 021 6603	SCR S-TPG BIN 3X8, COVER-MOUNTING
Y03	411 021 6603	SCR S-TPG BIN 3X8, REAR-COVER
Y04	411 020 9902	SCR S-TPG BRZ+FLG 3X8, CD MECHA
Y05	411 021 6405	SCR S-TPG BIN 3X8, MOUNTING-HOLDER
Y06	411 021 3503	SCR S-TPG BIN 3X10, SP SOCKET
Y07	411 098 0801	SCR S-TPG BIN 3X14, PHONO GND
Y08	411 008 0402	WASHER OUT TW 3, PHONO GND

PARTS LIST

Ref. No.	Part No.	Description
Y09	411 105 9704	WASHER Z 3X10X1, PHONO GND
Y10	411 021 3503	SCR S-TPG BIN 3X10, HOLDER-REAR
Y11	411 021 3503	SCR S-TPG BIN 3X10, RCD SOCKET
Y12	411 021 3503	SCR S-TPG BIN 3X10, ANT, SOCKET
Y13	411 021 6405	SCR S-TPG BIN 3X8, BOTTOM-REAR
Y14	411 021 6405	SCR S-TPG BIN 3X8, BOTTOM-HEATSINK(PRO)
Y15	411 021 6405	SCR S-TPG BIN 3X8, HOLDER-HEAT SINK (POWER)
Y16	411 021 9109	SCR S-TPG BIN 4X6, TRANS
Y17	411 021 6405	SCR S-TPG BIN 3X8, POWER PWB-MOUNTING
Y18	411 021 6405	SCR S-TPG BIN 3X8, BOTTOM-HOLDER(HEAT SINK)
Y19	411 021 6405	SCR S-TPG BIN 3X8, BOTTOM-MOUNTING
Y20	411 021 6405	SCR S-TPG BIN 3X8, HOLDER-TU & PHO PWB
Y21	411 021 6405	SCR S-TPG BIN 3X8, MOUNTING HOLDER,BRACKET
Y22	411 021 5705	SCR S-TPG BIN 3X6, BOTTOM-MOUNTING
Y23	411 021 6405	SCR S-TPG BIN 3X8, HOLDER BRACKET
Y24	411 020 9902	SCR S-TPG BRZ+FLG 3X8, HOLDER POWER & PROLOGIC
Y25	411 021 6405	SCR S-TPG BIN 3X8, POSISTOR
Y26	411 020 9407	SCR S-TPG BRZ+FLG 3X14, PROLOGIC IC-HEAT SINK
Y27	411 021 6405	SCR S-TPG BIN 3X8, PRO PWB-HEAT SINK
Y28	411 020 9506	SCR S-TPG BRZ+FLG 3X16, POWER IC-HEAT SINK
Y29	411 021 3701	SCR S-TPG BIN 3X10, CABINET
Y31	411 021 6405	SCR S-TPG BIN 3X8, LUG-MOUNTING
Y32	411 021 3503	SCR S-TPG BIN 3X10, FRONT-DECK MECHA
Y33	411 028 2905	SCR S-TPG PAN 2X4, REC, SPRING PLATE
Y34	411 021 6405	SCR S-TPG BIN 3X8, DECK PWB
Y35	411 028 2905	SCR S-TPG PAN 2X4, DECK-BRACKET
Y36	411 024 3708	SCR S-TPG PAN+FLG 2X6, DECK-BRACKET
Y37	411 021 6405	SCR S-TPG BIN 3X8, PRE PWB
Y38	411 021 6405	SCR S-TPG BIN 3X8, FRONT MOUNTING,BRACKET
Y39	411 021 3503	SCR S-TPG BIN 3X10, FRONT PWB (2)
Y40	411 021 3503	SCR S-TPG BIN 3X10, FRONT PWB (1)
Y41	411 021 3503	SCR S-TPG BIN 3X10, FRONT PWB (3)
Y42	411 020 8905	SCR S-TPG BRZ+FLG 3X10, SLIDE FIX
Y43	411 021 6405	SCR S-TPG BIN 3X8, CD DOOR SW
Y44	411 153 0708	WASHER Z 3X15X0.8, CD DOOR SW
Y45	411 021 3503	SCR S-TPG BIN 3X10, FRONT GEAR ASSY
Y46	411 021 3503	SCR S-TPG BIN 3X10, FRONT GEAR ASSY
Y47	411 021 6405	SCR S-TPG BIN 3X8, MECHA BUTTON BRACKET
Y48	411 021 3701	SCR S-TPG BIN 3X10, DOOR-COVER
Y49	411 021 3503	SCR S-TPG BIN 3X10, LOAD BUTTON,LAMP PWB
Y50	411 021 6405	SCR S-TPG BIN 3X8, H.P PWB

ELECTRICAL PARTS

Ref. No.	Part No.	Description
81	△ 614 243 0262	POWER CORD
or	△ 614 023 4503	POWER CORD
or	△ 614 023 4282	POWER CORD
or	△ 614 216 5843	POWER CORD
or	△ 614 023 3841	POWER CORD
82	614 284 5363	HEAT SINK, MAIN AMP
83	614 268 5389	SPACER, REAP AMP
84	614 285 4839	ASSY,HEAT SINK, REAR/CENTER AMP
85	645 010 2790	FLEXIBLE FLAT CABLE, (FRONT-CD SIDE), CN159
86	645 010 2783	FLEXIBLE FLAT CABLE, (FRONT-CD MAIN), CN132
87	△ 423 021 7306	FUSE 125V 5A, FU490
88	△ 423 021 7207	FUSE 125V 4A, FU491
89	△ 423 021 7207	FUSE 125V 4A, FU492
90	△ 645 005 5027	TRANS,POWER, PT400

TUNER P.W.BOARD ASSY

Ref. No.	Part No.	Description
101	614 283 9645	ASSY,PWB TUNER (N.S.P)
C2463	403 106 1603	NP-ELECT 1U Q 50V
CN201	645 005 0695	TERMINAL,ANT
CN241	645 007 0082	PLUG,5P
or	645 005 9292	PLUG,5P
CN242	645 007 0075	PLUG,4P
or	645 005 8110	PLUG,4P
CT211	645 012 7731	TRIMMER,11PF
or	614 007 6356	TRIMMER
D2101	407 157 8109	SVC211-B
D2102	407 157 8109	SVC211-B
D2103	407 157 8109	SVC211-B
D2104	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D2105	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D2153	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D2451	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D2452	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
IC231	409 329 3707	IC LA1836
IC245	409 066 7600	IC LM7001
L2102	614 240 0890	TRANS,RF
L2103	614 240 0906	TRANS,RF
L2105	645 001 5441	INDUCTOR,2.2U K
L2201	645 002 1534	INDUCTOR,8.2U K
L2451	645 001 4581	INDUCTOR,100U K
Q2101	405 114 8506	TR 2SK193-ML
or	405 114 8407	TR 2SK193-LL
Q2102	405 140 1007	TR 2SC2786-KL
or	405 012 5904	TR 2SC1923-Y
Q2104	405 140 1007	TR 2SC2786-KL
or	405 012 5904	TR 2SC1923-Y
Q2105	405 140 1007	TR 2SC2786-KL
or	405 012 5904	TR 2SC1923-Y
Q2201	405 012 9407	TR 2SC2058S-P
Q2302	405 020 7204	TR 2SC945A-K
or	405 011 7503	TR 2SC1740-S
Q2393	405 000 0904	TR DTA114YS
or	405 078 2404	TR BN1A4P
Q2461	405 020 7204	TR 2SC945A-K
or	405 011 7503	TR 2SC1740-S
Q2462	405 020 7204	TR 2SC945A-K
or	405 011 7503	TR 2SC1740-S

PARTS LIST

Ref. No.	Part No.	Description
Q2491	405 000 0904	TR DTA114YS
or	405 078 2404	TR BN1A4P
SH211	614 116 5349	SHIELD PLATE, FM_OSC
T2302	645 005 0084	TRANS,IF 10.7MHZ
U2151	645 005 6734	TUNER
VR231	645 006 2421	VR,SEMI,20K N
or	614 250 7254	POTENTIOMETER
VR232	645 001 9319	VR,SEMI,10K N
or	614 250 7247	POTENTIOMETER
X2301	645 010 0024	OSC,CERAMIC 456KHZ
or	614 246 0870	RESONATOR
X2451	645 010 9720	OSC,CRYSTAL 7.2MHZ
XF221	614 231 0199	FILTER, 10.7MHZ
XF222	614 231 0199	FILTER, 10.7MHZ
XF231	614 246 0849	FILTER, 450KHZ
XF232	614 253 4618	FILTER, 450KHZ

RCA P.W.BOARD ASSY

Ref. No.	Part No.	Description
102	614 283 9614	ASSY,PWB RCA, PHONO/VIDEO (N.S.P)
CN405	614 223 9278	SOCKET,9P, TO PRE AMP CN471
or	614 020 6616	SOCKET,9P, TO PRE AMP CN471
CN412	614 286 5644	CORD,9P CONNECTOR, TO PRE AMP CN471
CN489	614 249 8620	SOCKET, RCA4P-W/R
IC479	409 211 6601	IC NJM4558L
S4501	645 017 3974	SWITCH,PUSH 1P-1TX1, RESET

REAR AMP P.W.BOARD ASSY

Ref. No.	Part No.	Description
103	614 283 9522	ASSY,PWB REAR AMP (N.S.P)
C6724	403 057 2803	POLYESTER 0.1U K 50V
C6725	403 057 2803	POLYESTER 0.1U K 50V
C6824	403 057 2803	POLYESTER 0.1U K 50V
C6825	403 057 2803	POLYESTER 0.1U K 50V
C6936	403 086 8500	NP-ELECT 47U M 50V
C6962	403 057 2803	POLYESTER 0.1U K 50V
C6963	403 057 2803	POLYESTER 0.1U K 50V
C6965	404 060 2804	OS-SOLID 4.7U M 10V
C6967	404 060 2804	OS-SOLID 4.7U M 10V
C6969	404 062 0105	OS-SOLID 3.3U M 16V
C6970	403 067 6204	MT-COMPO 0.15U J 50V
C6971	403 067 6204	MT-COMPO 0.15U J 50V
C6972	404 062 0105	OS-SOLID 3.3U M 16V
C6974	404 060 2804	OS-SOLID 4.7U M 10V
C6976	404 060 2804	OS-SOLID 4.7U M 10V
C6978	403 057 2803	POLYESTER 0.1U K 50V
C6979	403 057 2803	POLYESTER 0.1U K 50V
C6981	403 067 7805	MT-COMPO 0.47U J 50V
CN600	614 020 6579	SOCKET,5P, TO PRE AMP CN479
or	614 223 9230	SOCKET,5P, TO PRE AMP CN479
CN601	614 286 3817	CORD,5P CONNECTOR, TO PRE AMP CN479
CN602	645 004 2966	PLUG,10P, TO FRONT MAIN CN180
CN603	645 009 3265	PLUG,3P, TO MAIN AMP CN424
or	645 006 1981	PLUG,3P, TO MAIN AMP CN424
CN604	614 020 1239	SOCKET,4P, TO REAR/CENT SP CN607
CN608	614 020 1253	SOCKET,6P, TO VR CN487
CN609	614 286 5637	CORD,SHIELD, TO VR CN487
D6701	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D6801	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D6903	407 053 8807	ZENER DIODE MTZ9.1B
IC670	△ 409 287 9605	IC STK401-040, REAR AMP

Ref. No.	Part No.	Description
IC671	409 297 7806	IC LA2785, PROLOGIC
IC672	409 334 0500	IC LV1010N, PROLOGIC
IC673	409 211 6601	IC NJM4558L, BUFFER AMP
L6901	645 001 5519	INDUCTOR,47U K
Q6701	405 033 6805	TR 2SD1468S-S
Q6702	405 016 3500	TR 2SC2909-T
or	405 016 3302	TR 2SC2909-S
Q6801	405 033 6805	TR 2SD1468S-S
Q6802	405 016 3500	TR 2SC2909-T
or	405 016 3302	TR 2SC2909-S
Q6901	405 016 3500	TR 2SC2909-T
or	405 016 3302	TR 2SC2909-S
Q6903	405 016 3500	TR 2SC2909-T
or	405 016 3302	TR 2SC2909-S
Q6904	405 002 8809	TR 2SA1207-T
or	405 002 8700	TR 2SA1207-S
Q6909	405 004 5004	TR 2SA608-G-NP
Q6910	405 020 7204	TR 2SC945A-K
or	405 019 2807	TR 2SC536-F-SPA
or	405 011 7503	TR 2SC1740-S
Q6911	405 020 7204	TR 2SC945A-K
or	405 019 2807	TR 2SC536-F-SPA
or	405 011 7503	TR 2SC1740-S
R6706	△ 614 242 0126	RESISTOR 0.22 K- 3W
R6709	△ 401 010 5601	CARBON 5.6 JB 1/2W
R6806	△ 614 242 0126	RESISTOR 0.22 K- 3W
R6809	△ 401 010 5601	CARBON 5.6 JB 1/2W
R6914	△ 402 023 1703	FUSIBLE RES 100 J- 1/4W
R6915	△ 402 023 1703	FUSIBLE RES 100 J- 1/4W
WR600	614 017 6964	TERMINAL BOARD, WRAPPER PIN
X6901	645 019 3880	OSC,CERAMIC 8MHZ
or	614 226 9923	FILTER

MAIN AMP P.W.BOARD ASSY

Ref. No.	Part No.	Description
104	614 283 9515	ASSY,PWB MAIN AMP (N.S.P)
	411 021 5705	SCR S-TPG BIN 3X6
	614 261 0589	HEAT SINK
C4704	403 057 2803	POLYESTER 0.1U K 50V
C4705	403 057 2803	POLYESTER 0.1U K 50V
C4804	403 057 2803	POLYESTER 0.1U K 50V
C4805	403 057 2803	POLYESTER 0.1U K 50V
C4901	△ 404 064 9809	ELECT 5600U M 70V
or	△ 404 064 5405	ELECT 5600U M 71V
C4902	△ 404 064 9809	ELECT 5600U M 70V
or	△ 404 064 5405	ELECT 5600U M 71V
C4903	△ 403 200 0205	ELECT 2200U M 35V
C4904	△ 403 200 0205	ELECT 2200U M 35V
C4910	△ 404 001 7202	ELECT 100U M 100V
C4911	△ 404 001 7202	ELECT 100U M 100V
C4922	△ 404 033 3401	CERAMIC 0.01U Z 400V
or	△ 404 033 3302	CERAMIC 0.01U M 400V
or	△ 404 000 1607	CERAMIC 0.01U F 400V
C4923	△ 403 194 3800	ELECT 2200U M 25V
C4935	△ 403 200 0205	ELECT 2200U M 35V
C4942	403 057 0403	POLYESTER 0.01U K 50V
C4943	403 057 0403	POLYESTER 0.01U K 50V
C4964	△ 403 200 7006	ELECT 4700U M 16V
CN407	614 020 1239	SOCKET,4P, TO MAIN SP CN404
CN408	614 020 6579	SOCKET,5P, TO HP CN406
or	614 223 9230	SOCKET,5P, TO HP CN406
CN410	614 286 3848	CORD,5P CONNECTOR, TO HP CN406
CN411	614 020 1246	SOCKET,5P, TO PT PRI CN409
CN421	614 020 1239	SOCKET,4P, TO PT CN426
CN423	645 020 9529	CORD,ID CONNECTOR, TO CD MAIN CN104

PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
CN424	614 020 1222	SOCKET,3P, TO PROLOGIC CN603	D4954	△ 407 012 0309	DIODE 1N4003
CN427	614 286 3824	CORD,3P CONNECTOR, TO REAR AMP CN603	or	△ 407 148 6701	DIODE 1A3-I
			or	△ 407 140 7201	DIODE DSR-10C-ET5
CN450	614 020 1222	SOCKET,3P, TO VR CN490	FPC01	645 006 4760	HOLDER,FUSE
CN451	614 020 6593	SOCKET,7P, TO PRE AMP CN472	FPC02	645 006 4760	HOLDER,FUSE
or	614 223 9254	SOCKET,7P, TO PRE AMP CN472	FPC03	645 006 4760	HOLDER,FUSE
CN452	614 020 6623	SOCKET,10P, TO PRE AMP CN473	FPC04	645 006 4760	HOLDER,FUSE
or	614 223 9285	SOCKET,10P, TO PRE AMP CN473	IC490	△ 409 169 7804	IC NJM78M05FA
CN453	614 286 3787	CORD,10P CONNECTOR, TO PRE AMP CN473	or	△ 409 078 1900	IC L7805ML
			IC491	△ 409 308 9508	IC STK401-130
CN454	614 286 3770	CORD,7P CONNECTOR, TO PRE AMP CN472	IC493	△ 409 140 0404	IC NJM79M12FA
			or	△ 409 131 3506	IC L79M12ML
CN455	614 286 5620	CORD,SHIELD, TO VR CN490	IC494	△ 409 168 2107	IC UPC7812HF
CN456	645 007 0976	CORD,SOCKET, TO REAR AMP	or	△ 409 122 6202	IC NJM7812FA
D4701	407 012 4406	DIODE 1SS133	or	△ 409 078 2402	IC L7812ML
D4801	407 012 4406	DIODE 1SS133	or	△ 409 001 7603	IC AN7812F
D4903	407 053 6704	ZENER DIODE MTZ5.6B	IC495	△ 409 168 2107	IC UPC7812HF
D4906	407 012 4406	DIODE 1SS133	or	△ 409 122 6202	IC NJM7812FA
D4911	407 012 4406	DIODE 1SS133	or	△ 409 078 2402	IC L7812ML
D4914	407 012 4406	DIODE 1SS133	or	△ 409 001 7603	IC AN7812F
D4915	△ 407 012 0309	DIODE 1N4003	IC496	△ 409 168 2107	IC UPC7812HF
or	△ 407 148 6701	DIODE 1A3-I	or	△ 409 122 6202	IC NJM7812FA
or	△ 407 140 7201	DIODE DSR-10C-ET5	or	△ 409 078 2402	IC L7812ML
D4916	△ 407 012 0309	DIODE 1N4003	or	△ 409 001 7603	IC AN7812F
or	△ 407 148 6701	DIODE 1A3-I	IC497	△ 409 254 7207	IC NJM7809FA
or	△ 407 140 7201	DIODE DSR-10C-ET5	or	△ 409 066 4500	IC L7809ML
D4917	△ 407 012 0309	DIODE 1N4003	or	△ 409 066 4005	IC AN7809F
or	△ 407 148 6701	DIODE 1A3-I	L4701	614 267 0958	V.H.F COIL, 1.7UH
or	△ 407 140 7201	DIODE DSR-10C-ET5	or	614 202 1712	V.H.F COIL, 1.7UH
D4918	△ 407 012 0309	DIODE 1N4003	L4801	614 267 0958	V.H.F COIL, 1.7UH
or	△ 407 148 6701	DIODE 1A3-I	or	614 202 1712	V.H.F COIL, 1.7UH
or	△ 407 140 7201	DIODE DSR-10C-ET5	PO490	408 017 0707	TH PTH9M04BC471TS2F333
D4922	△ 407 012 0309	DIODE 1N4003	PT401	△ 614 282 8014	POWER TRANS
or	△ 407 148 6701	DIODE 1A3-I	Q4701	405 022 5505	TR 2SD1468-R
or	△ 407 140 7201	DIODE DSR-10C-ET5	Q4702	405 032 8107	TR 2SC1845-F
D4923	△ 407 012 0309	DIODE 1N4003	or	405 012 3900	TR 2SC1845-E
or	△ 407 148 6701	DIODE 1A3-I	Q4801	405 022 5505	TR 2SD1468-R
or	△ 407 140 7201	DIODE DSR-10C-ET5	Q4802	405 032 8107	TR 2SC1845-F
D4924	△ 407 012 0309	DIODE 1N4003	or	405 012 3900	TR 2SC1845-E
or	△ 407 148 6701	DIODE 1A3-I	Q4904	405 005 2002	TR 2SA733-P
or	△ 407 140 7201	DIODE DSR-10C-ET5	or	405 005 1906	TR 2SA733-K
D4925	△ 407 012 0309	DIODE 1N4003	Q4905	405 020 7204	TR 2SC945A-K
or	△ 407 148 6701	DIODE 1A3-I	or	405 019 2807	TR 2SC536-F-SPA
or	△ 407 140 7201	DIODE DSR-10C-ET5	or	405 011 7503	TR 2SC1740-S
D4928	△ 407 100 0105	ZENER DIODE MTZJ33D	Q4906	405 020 7204	TR 2SC945A-K
D4929	407 063 9504	ZENER DIODE MTZJ8.2B	or	405 019 2807	TR 2SC536-F-SPA
D4930	407 012 4406	DIODE 1SS133	or	405 011 7503	TR 2SC1740-S
or	407 153 6109	DIODE 1SS119-041	Q4908	405 020 7204	TR 2SC945A-K
D4933	407 012 4406	DIODE 1SS133	or	405 019 2807	TR 2SC536-F-SPA
or	407 153 6109	DIODE 1SS119-041	or	405 011 7503	TR 2SC1740-S
D4935	△ 407 077 7800	DIODE RBV-402LF-A	Q4909	405 020 7204	TR 2SC945A-K
or	△ 407 146 3306	DIODE RBA-402LF-A	or	405 019 2807	TR 2SC536-F-SPA
D4939	△ 407 141 2809	DIODE IN5402	or	405 011 7503	TR 2SC1740-S
D4940	△ 407 141 2809	DIODE IN5402	Q4920	405 020 7204	TR 2SC945A-K
D4941	△ 407 141 2809	DIODE IN5402	or	405 019 2807	TR 2SC536-F-SPA
D4942	△ 407 141 2809	DIODE IN5402	or	405 011 7503	TR 2SC1740-S
D4950	407 004 9709	DIODE DSK10C	Q4922	405 033 6805	TR 2SD1468S-S
D4951	△ 407 012 0309	DIODE 1N4003	or	405 033 6706	TR 2SD1468S-R
or	△ 407 148 6701	DIODE 1A3-I	or	405 022 5505	TR 2SD1468-R
or	△ 407 140 7201	DIODE DSR-10C-ET5	Q4923	405 001 9302	TR 2SA1020-Y
D4952	△ 407 012 0309	DIODE 1N4003	Q4999	405 020 7204	TR 2SC945A-K
or	△ 407 148 6701	DIODE 1A3-I	or	405 019 2807	TR 2SC536-F-SPA
or	△ 407 140 7201	DIODE DSR-10C-ET5	or	405 011 7503	TR 2SC1740-S
D4953	△ 407 012 0309	DIODE 1N4003	R4705	△ 614 241 3449	RESISTOR 0.22 K- 5W
or	△ 407 148 6701	DIODE 1A3-I	R4709	△ 401 058 1108	OXIDE-MT 10 JA 1W
or	△ 407 140 7201	DIODE DSR-10C-ET5	R4710	△ 401 062 3907	OXIDE-MT 5.6 JA 1W

PARTS LIST

Ref. No.	Part No.	Description
R4805	△ 614 241 3449	RESISTOR 0.22 K- 5W
R4809	△ 401 058 1108	OXIDE-MT 10 JA 1W
R4810	△ 401 062 3907	OXIDE-MT 5.6 JA 1W
R4909	△ 401 227 4107	CARBON 270 JB 1/4W
R4916	△ 401 227 4107	CARBON 270 JB 1/4W
R4923	△ 402 048 2204	RESISTOR 1.2K J- 1W
R4935	△ 402 004 6406	FUSIBLE RES 3.9 J- 1/4W
R4952	△ 402 045 1309	RESISTOR 0.33 J- 1W
R4964	△ 402 045 1002	RESISTOR 0.18 J- 1W
R4999	△ 401 009 8101	CARBON 3.3M KA 1/2W
RY490	△ 645 019 2555	RELAY, AC POWER SUPPLY
or	△ 614 218 5032	RELAY, AC POWER SUPPLY
RY491	614 242 7767	RELAY, SPEAKER
or	614 224 4531	RELAY, SPEAKER
WR401	614 017 6964	TERMINAL BOARD
WR402	614 017 6964	TERMINAL BOARD

REAR-CENTER SPEAKER P.W.BOARD ASSY

Ref. No.	Part No.	Description
105	614 283 9560	ASSY,PWB REAR-CENTER SPEAKER (N.S.P)
CN605	614 248 7020	TERMINAL, CENTER SP
CN606	614 248 7013	TERMINAL, REAR SP
CN607	614 020 1239	SOCKET,4P, TO PROLOGIC CN604

MAIN SPEAKER P.W.BOARD ASSY

Ref. No.	Part No.	Description
106	614 283 9553	ASSY,PWB MAIN SPEAKER (N.S.P)
CN404	614 020 1239	SOCKET,4P, TO MAIN AMP CN407
CN460	645 008 5314	TERMINAL, MAIN SPEAKER

PT SECONDARY P.W.BOARD ASSY

Ref. No.	Part No.	Description
107	614 283 9546	ASSY,PWB PT SECONDARY (N.S.P)
CN409	614 020 1246	SOCKET,5P, TO MAIN AMP CN411
CN426	614 020 1239	SOCKET,4P, TO MAIN AMP CN421

PT PRIMARY P.W.BOARD ASSY

Ref. No.	Part No.	Description
108	614 283 9539	ASSY,PWB PT PRIMARY (N.S.P)
FPC05	645 006 4760	HOLDER,FUSE
FPC06	645 006 4760	HOLDER,FUSE

LAMP-EJECT SWITCH P.W.BOARD ASSY

Ref. No.	Part No.	Description
109	614 285 1395	ASSY,PWB LAMP-EJECT SW (N.S.P)
CN140	645 020 9161	CORD,ID CONNECTOR, TO FRONT MAIN CN134
PL171	614 255 8157	LAMP
or	614 253 4687	LAMP
S1740	614 240 1002	SWITCH,TACT, EJECT LOAD
or	614 220 5471	SWITCH,TACT, EJECT LOAD
or	645 006 5958	SWITCH,PUSH 1P-1T, EJECT LOAD

OPEN SWITCH P.W.BOARD ASSY

Ref. No.	Part No.	Description
110	614 285 1401	ASSY,OPEN SW (N.S.P)
CN143	614 286 3558	ASSY,CONNECTOR-S, TO FRONT MAIN CN133
S1741	614 249 1355	SWITCH,LEVER

FRONT MAIN P.W.BOARD ASSY

Ref. No.	Part No.	Description
111	614 283 9638	ASSY,PWB FRONT MAIN (N.S.P)
	614 266 6579	HOLDER, FOR FL BRACKET
CN130	645 021 0112	SOCKET,21P, TO CD CN156
CN131	645 021 0105	SOCKET,15P, TO CD CN103
CN133	645 009 6426	PLUG,2P, TO DOOR OPEN CN143
or	645 006 0908	PLUG,2P, TO DOOR OPEN CN143
CN134	645 005 8226	PLUG,3P, TO LAMP-EJECT CN140
or	645 009 6433	PLUG,3P, TO LAMP-EJECT CN140
CN170	614 286 3596	ASSY,CONNECTOR-S, TO FRONT SUB-1 CN171
CN180	614 020 6623	SOCKET,10P, TO PROLOGIC CN602
or	614 223 9285	SOCKET,10P, TO PROLOGIC CN602
CN181	614 286 3831	CORD,10P CONNECTOR, TO REAR AMP CN602
CN193	614 235 9099	CONNECTOR-S, TO FRONT SUB-2 CN192
CN232	614 286 3565	ASSY,CONNECTOR-S, TO TUNER CN242
CN422	645 005 3412	SOCKET,8P, TO PRE AMP CN477
CN425	645 005 3436	SOCKET,10P, TO PRE AMP CN480
CN431	645 005 3412	SOCKET,8P, TO PRE AMP CN478
CN432	645 005 3467	SOCKET,13P, TO PRE AMP CN476
CN433	645 005 3412	SOCKET,8P, TO VR CN486
D1301	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1303	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1304	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1305	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1306	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1307	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1308	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1309	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1310	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1311	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1312	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1700	407 138 4700	PHOTO DIODE SPS-420-1
D4971	407 099 5204	ZENER DIODE MTZJ5.1B
D6911	408 024 5207	LED SLZ-781C-22-AB-T2, PHANTOM MODE-GREEN
D6912	408 024 5207	LED SLZ-781C-22-AB-T2, WIDE MODE-GREEN
D6913	408 024 5207	LED SLZ-781C-22-AB-T2, 3-LOGIC MODE-GREEN
D6914	408 024 5207	LED SLZ-781C-22-AB-T2, PROLOGIC MODE-GREEN
D6915	408 024 5207	LED SLZ-781C-22-AB-T2, NORMAL MODE-GREEN
D6941	407 099 4603	ZENER DIODE MTZJ3.9B
D6942	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
FL171	645 008 7035	FLUORESCENT TUBE
IC111	410 258 1306	IC CXP82432A-135Q, SYSTEM MICON
IC112	410 225 5702	IC AT24C08-10PC, EEPROM
or	409 351 4208	IC ST24C08CB1, EEPROM
IC406	409 211 6601	IC NJM4558L

PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
IC668	410 265 4901	IC TMP47C203M-FP01(EL, PROLOGIC MICON	or	614 220 5471	SWITCH,TACT, REPEAT
L6941	645 001 4581	INDUCTOR,100U K	S1720	645 006 5958	SWITCH,PUSH 1P-1T, DISC CHECK
Q1301	405 000 4407	TR DTC124ES	or	614 240 1002	SWITCH,TACT, DISC CHECK
or	405 078 2800	TR BA1F4M	or	614 220 5471	SWITCH,TACT, DISC CHECK
Q1302	405 005 2002	TR 2SA733-P	S1721	645 006 5958	SWITCH,PUSH 1P-1T, "O"
or	405 005 1906	TR 2SA733-K	or	614 240 1002	SWITCH,TACT, "O"
Q1303	405 000 4407	TR DTC124ES	or	614 220 5471	SWITCH,TACT, "O"
or	405 078 2800	TR BA1F4M	S1722	645 006 5958	SWITCH,PUSH 1P-1T, "9"
Q1304	405 000 4407	TR DTC124ES	or	614 240 1002	SWITCH,TACT, "9"
or	405 078 2800	TR BA1F4M	or	614 220 5471	SWITCH,TACT, "9"
Q1305	405 000 3806	TR DTC114YS	S1723	645 006 5958	SWITCH,PUSH 1P-1T, "8"
or	405 068 4807	TR BA1A4P	or	614 240 1002	SWITCH,TACT, "8"
Q1306	405 000 3806	TR DTC114YS	or	614 220 5471	SWITCH,TACT, "8"
or	405 068 4807	TR BA1A4P	S1724	645 006 5958	SWITCH,PUSH 1P-1T, "7"
Q1307	405 000 3806	TR DTC114YS	or	614 240 1002	SWITCH,TACT, "7"
or	405 068 4807	TR BA1A4P	or	614 220 5471	SWITCH,TACT, "7"
Q1308	405 000 0904	TR DTA114YS	S1725	645 006 5958	SWITCH,PUSH 1P-1T, "6"
or	405 078 2404	TR BN1A4P	or	614 240 1002	SWITCH,TACT, "6"
Q1309	405 000 0904	TR DTA114YS	or	614 220 5471	SWITCH,TACT, "6"
or	405 078 2404	TR BN1A4P	S1726	645 006 5958	SWITCH,PUSH 1P-1T, "5"
Q1310	405 000 0904	TR DTA114YS	or	614 240 1002	SWITCH,TACT, "5"
or	405 078 2404	TR BN1A4P	or	614 220 5471	SWITCH,TACT, "5"
Q1311	405 020 7204	TR 2SC945A-K	S1727	645 006 5958	SWITCH,PUSH 1P-1T, "4"
or	405 011 7503	TR 2SC1740-S	or	614 240 1002	SWITCH,TACT, "4"
Q1312	405 020 7204	TR 2SC945A-K	or	614 220 5471	SWITCH,TACT, "4"
or	405 011 7503	TR 2SC1740-S	S1728	645 006 5958	SWITCH,PUSH 1P-1T, "3"
Q4941	405 005 2002	TR 2SA733-P	or	614 240 1002	SWITCH,TACT, "3"
or	405 005 1906	TR 2SA733-K	or	614 220 5471	SWITCH,TACT, "3"
Q4942	405 005 2002	TR 2SA733-P	S1729	645 006 5958	SWITCH,PUSH 1P-1T, "2"
or	405 005 1906	TR 2SA733-K	or	614 240 1002	SWITCH,TACT, "2"
S1701	645 006 5958	SWITCH,PUSH 1P-1T, TUNING DOWN	or	614 220 5471	SWITCH,TACT, "2"
or	614 240 1002	SWITCH,TACT, TUNING DOWN	S1730	645 006 5958	SWITCH,PUSH 1P-1T, "1"
or	614 220 5471	SWITCH,TACT, TUNING DOWN	or	614 240 1002	SWITCH,TACT, "1"
S1702	645 006 5958	SWITCH,PUSH 1P-1T, TUNING UP	or	614 220 5471	SWITCH,TACT, "1"
or	614 240 1002	SWITCH,TACT, TUNING UP	S1731	645 006 5958	SWITCH,PUSH 1P-1T, BAND
or	614 220 5471	SWITCH,TACT, TUNING UP	or	614 240 1002	SWITCH,TACT, BAND
S1703	645 006 5958	SWITCH,PUSH 1P-1T, TUNER PRESET UP	or	614 220 5471	SWITCH,TACT, BAND
or	614 240 1002	SWITCH,TACT, TUNER PRESET UP	S1732	645 006 5958	SWITCH,PUSH 1P-1T, FM MODE
or	614 220 5471	SWITCH,TACT, TUNER PRESET UP	or	614 240 1002	SWITCH,TACT, FM MODE
S1704	645 006 5958	SWITCH,PUSH 1P-1T, TUNER PRESET DOWN	or	614 220 5471	SWITCH,TACT, FM MODE
or	614 240 1002	SWITCH,TACT, TUNER PRESET DOWN	S1733	645 006 5958	SWITCH,PUSH 1P-1T, TUNER MEMORY
or	614 220 5471	SWITCH,TACT, TUNER PRESET DOWN	or	614 240 1002	SWITCH,TACT, TUNER MEMORY
S1711	645 006 5958	SWITCH,PUSH 1P-1T, CATEGORY SUB	or	614 220 5471	SWITCH,TACT, TUNER MEMORY
or	614 240 1002	SWITCH,TACT, CATEGORY SUB	S2701	645 006 5958	SWITCH,PUSH 1P-1T, CENTER VOL UP
or	614 220 5471	SWITCH,TACT, CATEGORY SUB	or	614 240 1002	SWITCH,TACT, CENTER VOL UP
S1712	645 006 5958	SWITCH,PUSH 1P-1T, CATEGORY MAIN	or	614 220 5471	SWITCH,TACT, CENTER VOL UP
or	614 240 1002	SWITCH,TACT, CATEGORY MAIN	S2702	645 006 5958	SWITCH,PUSH 1P-1T, CENTER VOL DOWN
or	614 220 5471	SWITCH,TACT, CATEGORY MAIN	or	614 240 1002	SWITCH,TACT, CENTER VOL DOWN
S1713	645 006 5958	SWITCH,PUSH 1P-1T, FORWARD	or	614 220 5471	SWITCH,TACT, CENTER VOL DOWN
or	614 240 1002	SWITCH,TACT, FORWARD	S2703	645 006 5958	SWITCH,PUSH 1P-1T, REAR VOL UP
or	614 220 5471	SWITCH,TACT, FORWARD	or	614 240 1002	SWITCH,TACT, REAR VOL UP
S1716	645 006 5958	SWITCH,PUSH 1P-1T, BACK	or	614 220 5471	SWITCH,TACT, REAR VOL UP
or	614 240 1002	SWITCH,TACT, BACK	S2704	645 006 5958	SWITCH,PUSH 1P-1T, REAR VOL DOWN
or	614 220 5471	SWITCH,TACT, BACK	or	614 240 1002	SWITCH,TACT, REAR VOL DOWN
S1717	645 006 5958	SWITCH,PUSH 1P-1T, INTRO	or	614 220 5471	SWITCH,TACT, REAR VOL DOWN
or	614 240 1002	SWITCH,TACT, INTRO	S2705	645 006 5958	SWITCH,PUSH 1P-1T, DOLBY
or	614 220 5471	SWITCH,TACT, INTRO	or	614 240 1002	SWITCH,TACT, DOLBY
S1718	645 006 5958	SWITCH,PUSH 1P-1T, RANDOM	or	614 220 5471	SWITCH,TACT, DOLBY
or	614 240 1002	SWITCH,TACT, RANDOM	S2706	645 006 5958	SWITCH,PUSH 1P-1T, MODE
or	614 220 5471	SWITCH,TACT, RANDOM	or	614 240 1002	SWITCH,TACT, MODE
S1719	645 006 5958	SWITCH,PUSH 1P-1T, REPEAT	or	614 220 5471	SWITCH,TACT, MODE
or	614 240 1002	SWITCH,TACT, REPEAT	S2707	645 006 5958	SWITCH,PUSH 1P-1T, TEST TONE
			or	614 240 1002	SWITCH,TACT, TEST TONE

PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
or	614 220 5471	SWITCH,TACT, TEST TONE	or	614 240 1002	SWITCH,TACT, DISC DOWN
S4001	645 006 2391	SWITCH,PUSH 2P-2T, DBASSSW	or	614 220 5471	SWITCH,TACT, DISC DOWN
VR401	645 008 5383	VR,ROTARY 250KWX1, BALANCE	S1735	645 006 5958	SWITCH,PUSH 1P-1T, ENTER SUB
VR402	645 019 2548	VR,ROTARY 50KBX2, BASS	or	614 240 1002	SWITCH,TACT, ENTER SUB
VR403	645 019 2548	VR,ROTARY 50KBX2, TREBLE	or	614 220 5471	SWITCH,TACT, ENTER SUB
X1301	614 215 5561	RESONATOR,CERAM	S1736	645 006 5958	SWITCH,PUSH 1P-1T, CD MEMORY
X6902	614 215 5561	RESONATOR,CERAM	or	614 240 1002	SWITCH,TACT, CD MEMORY
			or	614 220 5471	SWITCH,TACT, CD MEMORY
			S1737	645 006 5958	SWITCH,PUSH 1P-1T, CLEAR
			or	614 240 1002	SWITCH,TACT, CLEAR
			or	614 220 5471	SWITCH,TACT, CLEAR
			S1738	645 006 5958	SWITCH,PUSH 1P-1T, ENTER MAIN
			or	614 240 1002	SWITCH,TACT, ENTER MAIN
			or	614 220 5471	SWITCH,TACT, ENTER MAIN
			S1739	645 006 5958	SWITCH,PUSH 1P-1T, DISC UP
			or	614 240 1002	SWITCH,TACT, DISC UP
			or	614 220 5471	SWITCH,TACT, DISC UP
			S3501	645 006 2391	SWITCH,PUSH 2P-2T, DUBBING/BEAT CCL
FRONT SUB-1 P.W.BOARD ASSY					
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
112	614 283 9591	ASSY,PWB FRONT SUB-1 (N.S.P)			
CN171	645 007 0150	PLUG,12P, TO FRONT MAIN CN170			
or	645 006 0878	PLUG,12P, TO FRONT MAIN CN170			
D1305	408 024 5306	LED SLZ-981B-22-AB-T2, STANDBY LED-RED			
D1601	408 023 3105	LED SLZ-781C-09-AB-T1, FUNCTION-GREEN			
D1602	408 023 3105	LED SLZ-781C-09-AB-T1, FUNCTION-GREEN			
D1603	408 023 3105	LED SLZ-781C-09-AB-T1, FUNCTION-GREEN			
D1604	408 023 3105	LED SLZ-781C-09-AB-T1, FUNCTION-GREEN			
D1605	408 023 3105	LED SLZ-781C-09-AB-T1, FUNCTION-GREEN			
D1606	408 023 3105	LED SLZ-781C-09-AB-T1, FUNCTION-GREEN			
D1607	408 023 3105	LED SLZ-781C-09-AB-T1, FUNCTION-GREEN			
D1608	408 023 3105	LED SLZ-781C-09-AB-T1, FUNCTION-GREEN			
D1609	408 023 3105	LED SLZ-781C-09-AB-T1, FUNCTION-GREEN			
D1610	408 023 3105	LED SLZ-781C-09-AB-T1, FUNCTION-GREEN			
D1611	408 030 9909	LED SLZ-981B-09T-AB-T1, FUNCTION LED RED			
D1612	408 030 9909	LED SLZ-981B-09T-AB-T1, FUNCTION LED RED			
D1613	408 030 9909	LED SLZ-981B-09T-AB-T1, FUNCTION LED RED			
D1614	408 030 9909	LED SLZ-981B-09T-AB-T1, FUNCTION LED RED			
D1615	408 030 9909	LED SLZ-981B-09T-AB-T1, FUNCTION LED RED			
IC161	409 003 9308	IC BU4051B, FUNCTION INDICATOR LED			
S1705	645 006 5958	SWITCH,PUSH 1P-1T, VIDEO			
or	614 240 1002	SWITCH,TACT, VIDEO			
or	614 220 5471	SWITCH,TACT, VIDEO			
S1706	645 006 5958	SWITCH,PUSH 1P-1T, PHONO			
or	614 240 1002	SWITCH,TACT, PHONO			
or	614 220 5471	SWITCH,TACT, PHONO			
S1707	645 006 5958	SWITCH,PUSH 1P-1T, TUNER			
or	614 240 1002	SWITCH,TACT, TUNER			
or	614 220 5471	SWITCH,TACT, TUNER			
S1708	645 006 5958	SWITCH,PUSH 1P-1T, TAPE			
or	614 240 1002	SWITCH,TACT, TAPE			
or	614 220 5471	SWITCH,TACT, TAPE			
S1709	645 006 5958	SWITCH,PUSH 1P-1T, CD			
or	614 240 1002	SWITCH,TACT, CD			
or	614 220 5471	SWITCH,TACT, CD			
S1710	645 006 5958	SWITCH,PUSH 1P-1T, POWER			
or	614 240 1002	SWITCH,TACT, POWER			
or	614 220 5471	SWITCH,TACT, POWER			
S1734	645 006 5958	SWITCH,PUSH 1P-1T, DISC DOWN			
FRONT SUB-2 P.W.BOARD ASSY					
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
113	614 283 9621	ASSY,PWB FRONT SUB-2 (N.S.P)			
CN192	614 235 8825	CONNECTOR-P, TO FRONT MAIN CN193			
S1714	645 006 5958	SWITCH,PUSH 1P-1T, PLAY/PAUSE			
or	614 240 1002	SWITCH,TACT, PLAY/PAUSE			
or	614 220 5471	SWITCH,TACT, PLAY/PAUSE			
S1715	614 220 5471	SWITCH,TACT, STOP			
or	645 006 5958	SWITCH,PUSH 1P-1T, STOP			
or	614 240 1002	SWITCH,TACT, STOP			
PRE AMP P.W.BOARD ASSY					
Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
114	614 283 9584	ASSY,PWB PRE AMP (N.S.P)			
CN470	645 020 9536	CORD,ID CONNECTOR, TO CD CN105 4P			
CN471	645 004 2959	PLUG,9P, TO PHONO/VIDEO CN405			
CN472	645 004 2935	PLUG,7P, TO POWER AMP CN451			
CN473	645 004 2966	PLUG,10P, TO POWER AMP CN452			
CN476	645 005 3351	PLUG,13P, TO FRONT MAIN CN432			
CN477	645 005 3306	PLUG,8P, TO FRONT MAIN CN422			
CN478	645 005 3306	PLUG,8P, TO FRONT MAIN CN431			
CN479	645 004 2911	PLUG,5P, TO PROLOGIC CN600			
CN480	645 005 3320	PLUG,10P, TO FRONT MAIN CN425			
CN482	614 286 3589	ASSY,CONNECTOR-S, TO TUNER CN241			
CN483	614 020 6616	SOCKET,9P, TO DECK CN301			
or	614 223 9278	SOCKET, TO DECK CN301			
CN484	614 020 6579	SOCKET,5P, TO DECK CN302			
or	614 223 9230	SOCKET, TO DECK CN302			
CN485	614 286 3794	CORD,5P CONNECTOR, TO DECK CN302			
CN488	614 286 3800	CORD,9P CONNECTOR, TO DECK CN301			
D4522	407 053 6308	ZENER DIODE MTZ5.1B			
D4580	407 053 6308	ZENER DIODE MTZ5.1B			
D4581	407 012 4406	DIODE 1SS133			
or	407 153 6109	DIODE 1SS119-041			
D4622	407 053 6308	ZENER DIODE MTZ5.1B			
IC472	409 336 0508	IC BU4052BC, FUNCTION SELECT			
IC480	409 211 6601	IC NJM4558L, BUFFER AMP			
IC482	409 211 6601	IC NJM4558L, BUFFER AMP			
IC483	409 114 4803	IC LB1641, VOL MOTOR DRIVER			
IC486	409 336 0508	IC BU4052BC, FUNCTION SELECT			
Q4501	405 020 7402	TR 2SC945A-P			

PARTS LIST

Ref. No.	Part No.	Description	Ref. No.	Part No.	Description
or	405 020 7204	TR 2SC945A-K	or	407 012 4406	DIODE 1SS133
Q4502	405 073 6407	TR 2SK772-E	or	407 153 6109	DIODE 1SS119-041
Q4503	405 015 6403	TR 2SC2785-F	D3105	407 012 5809	DIODE 1SS176
or	405 015 6205	TR 2SC2785-E	or	407 012 4406	DIODE 1SS133
or	405 011 8609	TR 2SC1740S-S	or	407 153 6109	DIODE 1SS119-041
or	405 011 8500	TR 2SC1740S-R	D3106	407 012 5809	DIODE 1SS176
Q4505	405 033 6805	TR 2SD1468S-S	or	407 012 4406	DIODE 1SS133
Q4507	405 005 2002	TR 2SA733-P	or	407 153 6109	DIODE 1SS119-041
or	405 005 1906	TR 2SA733-K	D3111	407 012 5809	DIODE 1SS176
Q4601	405 020 7402	TR 2SC945A-P	or	407 012 4406	DIODE 1SS133
or	405 020 7204	TR 2SC945A-K	or	407 153 6109	DIODE 1SS119-041
Q4602	405 073 6407	TR 2SK772-E	IC371	409 251 1000	IC TA8189N, PRE&REC AMP
Q4603	405 015 6403	TR 2SC2785-F	L3601	614 212 1023	TRANS,OSC, 7MM OSC COIL
or	405 015 6205	TR 2SC2785-E	L3701	614 028 4379	FILTER, 1MH 10MM AXIAL
or	405 011 8609	TR 2SC1740S-S	L3801	614 028 4379	FILTER, 1MH 10MM AXIAL
or	405 011 8500	TR 2SC1740S-R	Q3101	405 005 2002	TR 2SA733-P
Q4605	405 033 6805	TR 2SD1468S-S	or	405 005 1906	TR 2SA733-K
Q4701	405 075 8102	TR DTA143ZS	Q3102	405 015 6403	TR 2SC2785-F
R4580	Δ 402 004 4303	FUSIBLE RES 10 J- 1/4W	or	405 015 6205	TR 2SC2785-E
			or	405 011 8609	TR 2SC1740S-S
			or	405 011 8500	TR 2SC1740S-R

MAIN VOLUME P.W.BOARD ASSY

Ref. No.	Part No.	Description
115	614 283 9607	ASSY,PWB MAIN VOLUME (N.S.P)
CN486	645 005 3306	PLUG,8P, TO FRONT MAIN CN433
CN487	645 004 2928	PLUG,6P, TO PROLOGIC CN608
CN490	645 004 2898	PLUG,3P, TO MAIN AMP CN450
VR459	645 008 7097	VR,ROTARY 100KBX4,MOTOR, MAIN VOLUME

HEADPHONE P.W.BOARD ASSY

Ref. No.	Part No.	Description
116	614 283 9577	ASSY,PWB HEADPHONE (N.S.P)
CN406	645 004 2911	PLUG,5P, TO MAIN AMP CN408
CN461	645 009 0042	JACK,PHONE D6.43, HP SOCKET
R4714	Δ 401 067 5708	OXIDE-MT 330 JA 2W
R4814	Δ 401 067 5708	OXIDE-MT 330 JA 2W

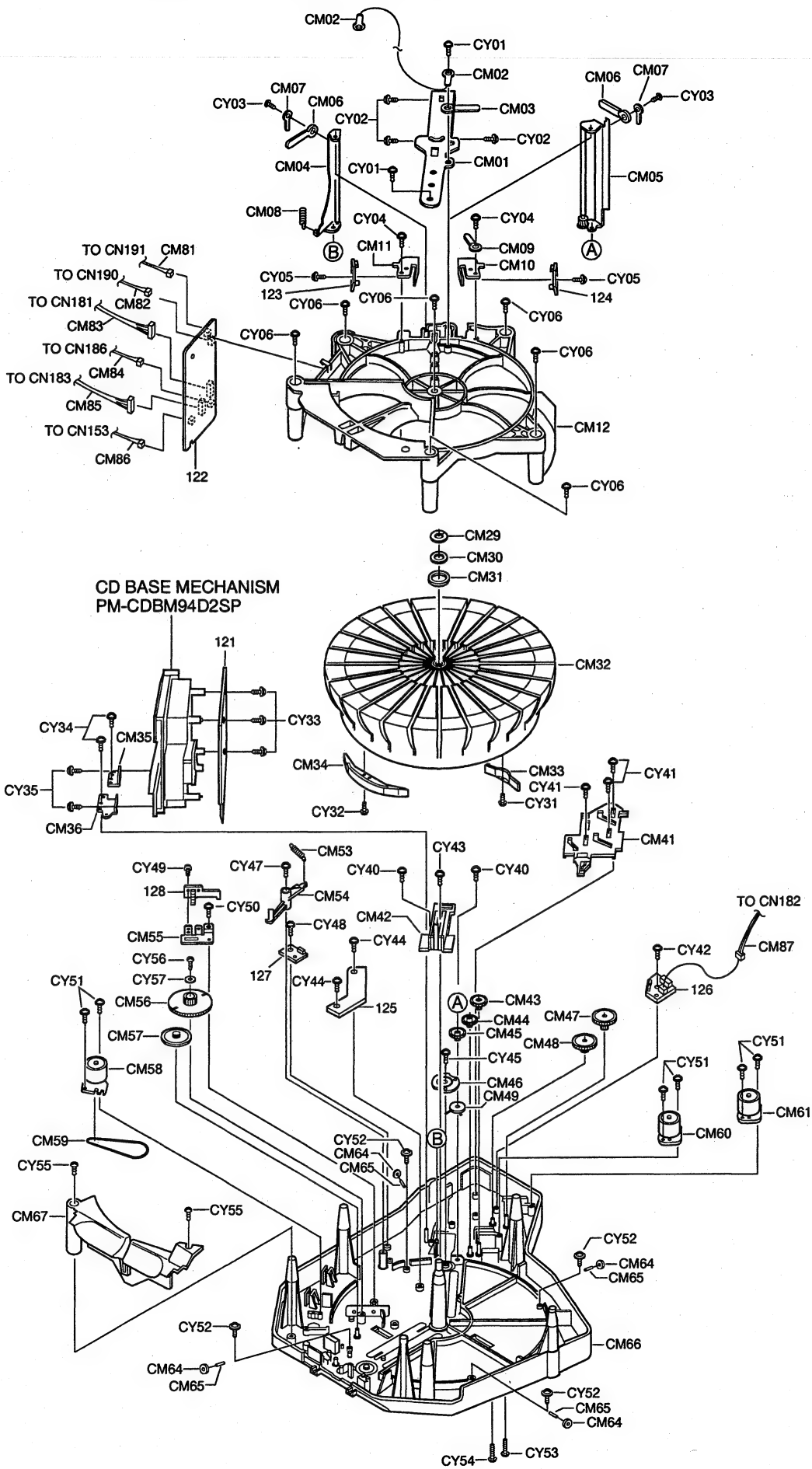
DECK P.W.BOARD ASSY

Ref. No.	Part No.	Description
117	614 285 2200	ASSY,PWB DECK (N.S.P)
C3603	403 058 9900	POLYESTER 0.018U K 50V
C3604	403 062 1105	POLYESTER 0.047U M 50V
C3605	403 058 1102	POLYESTER 1500P K 50V
CN301	645 004 2959	PLUG,9P, DECK-AMP LEAD
CN302	645 004 2911	PLUG,5P, DECK-AMP LEAD
CN303	645 005 8127	PLUG,6P, MECHA SW LEAD
or	645 007 0099	PLUG,6P, MECHA SW LEAD
CN304	614 020 6562	SOCKET, DIP-MATE FOR MOTOR LEAD
or	614 223 9223	SOCKET, DIP-MATE FOR MOTOR LEAD
CN305	614 016 4084	PLUG, HIGH SPEED TEST POINT
CN307	614 020 6548	SOCKET, DIPMATE FOR CN317
or	614 223 9209	SOCKET, DIPMATE FOR CN317
CN371	645 007 0075	PLUG,4P, PLAY HEAD
or	645 005 8110	PLUG,4P, PLAY HEAD
CN372	645 007 0099	PLUG,6P, R/P,E.HEAD
or	645 005 8127	PLUG,6P, R/P,E.HEAD
D3101	407 012 5809	DIODE 1SS176
or	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D3102	407 012 5809	DIODE 1SS176
or	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D3103	407 012 5809	DIODE 1SS176
or	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D3104	407 012 5809	DIODE 1SS176

STOP SWITCH P.W.BOARD ASSY

Ref. No.	Part No.	Description
118	614 266 6036	ASSY,PWB STOP SW (N.S.P)
CN317	614 020 6548	SOCKET, DIP MATE FOR STOP SW
or	614 223 9209	SOCKET, DIP MATE FOR STOP SW
S3001	645 011 5097	SWITCH,LEAF

EXPLODED VIEW (CD CHANGER MECHANISM)



PARTS LIST

CD CHANGER MECHANISM (PM-CDRCH2) ... N.S.P

CHANGER MECHANISM SECTION

Ref. No.	Part No.	Description
CM01	614 247 8899	BRACKET-M, BASE MECHA SUPPORT
CM02	614 129 9099	LUG, FOR EARTH
CM03	614 129 9136	LUG, FOR LEAD DRESSING
CM04	614 254 8028	ASSY,LEVER, PLAY LEFT ROLLER
CM05	614 254 8035	ASSY,LEVER, ROLLER BACK RIGHT
CM06	614 129 9341	LUG, VINYL WIRE FIX
CM07	614 129 9068	LUG, LEVER EARTH
CM08	614 247 9315	SPRING,TENSION, P-L LEVER PULL
CM09	614 129 9105	LUG, DRESS VINYL WIRE
CM10	614 248 9307	BRACKET-E, PLAY SENSOR (P-R)
CM11	614 248 9314	BRACKET-E, PLAY LED (P-L)
CM12	614 265 8475	COVER, TOP PANEL
CM29	412 052 8505	SPECIAL WASHER, FOR TURNTABLE THRUST
CM30	412 047 7308	SPECIAL WASHER, FOR DISC NOISE
CM31	614 253 7299	BELT,SQUARE, PREVENT FOR NOISE
CM32	614 265 1643	TURNTABLE, 24 DISC TABLE
CM33	614 247 8981	MOUNT-M, SW LEVER DRIVE
CM34	614 265 8963	CAM, SW LEVER DRIVE
CM35	614 247 8912	BRACKET-M, BASE MECHA OUT
CM36	614 247 8905	BRACKET-M, BASE MECHA IN
CM41	614 247 9261	SLIDE, CHUCK DRIVE
CM42	614 247 9278	SLIDE, DISC
CM43	614 247 9131	GEAR, LOADING 2 (PLAY)
CM44	614 247 9124	GEAR, LOADING 3 (PLAY)
CM45	614 247 9117	GEAR, LOADING 4 (PLAY)
CM46	614 247 9087	GEAR, SLIDE CAM G (PLAY)
CM47	614 247 9070	GEAR, SLIDE DRIVER M-1
CM48	614 247 9063	GEAR, SLIDE DRIVER M-2
CM49	614 253 9071	ASSY,GEAR, SLIP (PLAY)
CM53	614 249 0525	SPRING,TENS, FOR PINCH LEVER
CM54	614 247 9216	LEVER, SW
CM55	614 247 8882	BRACKET-E, SENSOR
CM56	614 247 9056	GEAR, TURNTABLE
CM57	614 265 8550	PULLEY, TURNTABLE
CM58	614 253 6957	ASSY,MOTOR, TURNTABLE
CM59	614 247 9209	BELT,SQUARE, TURNTABLE ROTATE
CM60	614 255 4999	ASSY,MOTOR, PLAY LOADING
CM61	614 255 4999	ASSY,MOTOR, CHUCKING
CM64	614 249 9351	ASSY,ROLLER, DISC TRAY SUPPORT
CM65	614 249 4035	SHAFT, DISC TRAY ROLLER
CM66	614 247 8844	CHASSIS, BASE
CM67	614 266 6678	MOUNTING, DISC GUIDE
CM81	614 273 9518	ASSY,CONNECTOR-S, FROM PLAY LED PWB
or	614 270 0679	ASSY,CONNECTOR-S, FROM PLAY LED PWB
CM82	614 270 0693	ASSY,CONNECTOR-S, FROM PLAY SENSOR PWB
or	614 273 9563	ASSY,CONNECTOR-S, FROM PLAY SENSOR PWB
CM83	614 253 8968	ASSY,CONNECTOR-S, FROM CHUCKING SW PWB
or	614 271 9251	ASSY,CONNECTOR-S, FROM CHUCKING SW PWB
CM84	614 253 8913	ASSY,CONNECTOR-S, FROM RESET SW PWB
or	614 271 9213	ASSY,CONNECTOR-S, FROM RESET SW PWB
CM85	614 269 9454	ASSY,WIRE, FROM LOCK SLIDE SW PWB
CM86	614 269 9447	ASSY,WIRE, FROM TURNTABLE MOTOR

Ref. No.	Part No.	Description
CM87	614 253 5806	ASSY,CONNECTOR-S, FROM CHUCKING & PLAY LOADING MOTOR
CM101	614 233 0227	PLATE, CHUCK
CM102	614 269 5739	SPRING,WIRE, FOR CHUCK LEVER
CM103	614 247 9223	LEVER, CHUCK
CM104	614 262 8928	MAGNET, CHUCK PRESSURE
CM105	614 250 2648	ASSY,PULLEY, CHUCK
CM106	614 247 8950	MOUNT-M, CHUCK BRACKET
CM107	614 247 8943	MOUNT-M, BASE MECHA BRACKET
CM108	614 247 8929	BRACKET-M, BASE MECHA HOLD
CM109	614 277 1952	CUSHION,RUBBER, FLOAT SIDE
or	614 237 7031	CUSHION,RUBBER, FLOAT SIDE
CM110	614 247 4907	SPRING,COMP, FLOAT SIDE
CM111	614 247 8851	CHASSIS,SUB, BASE MECHA PLATE
CM112	614 270 2192	DAMPER, FLOAT UP/DOWN

FIXING PARTS

Ref. No.	Part No.	Description
CY01	412 003 1708	SPECIAL SCREW, BRACKET FIX
CY02	411 020 9902	SCR S-TPG BRZ+FLG 3X8, DISC GUIDE UP FIX
CY03	411 025 1901	SCR S-TPG PAN 2X3, LUG FIX
CY04	411 020 9902	SCR S-TPG BRZ+FLG 3X8, BRACKET-E FIX
CY05	411 023 2801	SCR S-TPG PAN 2.6X6, PLAY LED/SENSOR PWB FIX
CY06	411 020 9407	SCR S-TPG BRZ+FLG 3X14, TOP PANEL FIX
CY31	411 022 8408	SCR S-TPG PAN 2X8, MOUNT-M FIX
CY32	411 022 8408	SCR S-TPG PAN 2X8, CAM FIX
CY33	411 020 9902	SCR S-TPG BRZ+FLG 3X8, BASE -PWB FIX
CY34	411 020 9902	SCR S-TPG BRZ+FLG 3X8, BRACKET-M FIX
CY35	411 020 8905	SCR S-TPG BRZ+FLG 3X10, MOUNT-M FIX
CY40	412 003 1708	SPECIAL SCREW, SLIDE FIX
CY41	411 020 9902	SCR S-TPG BRZ+FLG 3X8, SLIDE FIX
CY42	411 020 9902	SCR S-TPG BRZ+FLG 3X8, PWB FIX
CY43	411 020 9902	SCR S-TPG BRZ+FLG 3X8, SLIDE FIX
CY44	411 020 9902	SCR S-TPG BRZ+FLG 3X8, PWB FIX
CY45	620 123 0772	SCREW WASHER, GEAR FIX
CY47	411 020 9902	SCR S-TPG BRZ+FLG 3X8, LEVER FLX
CY48	411 020 9902	SCR S-TPG BRZ+FLG 3X8, PWB FIX
CY49	411 023 2207	SCR S-TPG PAN 2.6X4, DISC TRAY SENSOR PWB FIX
CY50	411 020 9902	SCR S-TPG BRZ+FLG 3X8, BRACKET FIX
CY51	411 020 9902	SCR S-TPG BRZ+FLG 3X8, BRACKET MOTOR FIX
or	411 020 9902	SCR S-TPG BRZ+FLG 3X8, BRACKET MOTOR FIX
or	411 020 9902	SCR S-TPG BRZ+FLG 3X8, BRACKET MOTOR FIX
CY52	412 003 1708	SPECIAL SCREW, FIX ROLLER
CY53	411 119 9103	SCR S-TPG PAN 2X16, GEAR FIX
CY54	411 119 9103	SCR S-TPG PAN 2X16, GEAR FIX
CY55	411 021 3701	SCR S-TPG BIN 3X10
CY56	411 023 3303	SCR S-TPG PAN 2.6X8, GEAR FIX
CY57	411 087 6005	WASHER V 2.6X7.5X0.5, GEAR FIX

PARTS LIST

Ref. No.	Part No.	Description
CY101	411 022 7500	SCR S-TPG PAN 2X4, CHUCK PLATE FIX
CY102	412 003 1708	SPECIAL SCREW, CHUCK LEVER FIX
CY103	411 020 9902	SCR S-TPG BRZ+FLG 3X8, BRACKET-M FIX

CD MAIN P.W.BOARD ASSY

Ref. No.	Part No.	Description
121	614 286 5569	ASSY,PWB CD MAIN (N.S.P)
	614 117 1098	SHIELD PLATE, FOR-SHIELD
C1113	403 154 2102	NP-ELECT 1U M 50V
CN101	645 007 1058	SOCKET,FPC 13P
CN102	645 005 8127	PLUG,6P
or	645 007 0099	PLUG,6P
CN103	645 021 0105	SOCKET,15P, TO FRONT MAIN CN131
CN104	645 007 0051	PLUG,2P
or	645 005 7366	PLUG,2P
CN105	645 007 0075	PLUG,4P
or	645 005 8110	PLUG,4P
CN106	645 007 0075	PLUG,4P
or	645 005 8110	PLUG,4P
D1420	407 012 4406	DIODE 1SS133
or	407 153 6109	DIODE 1SS119-041
D1531	407 099 5204	ZENER DIODE MTZJ5.1B
IC101	409 346 2806	IC LA9220MS
IC102	409 317 8509	IC BA6398FP
IC104	409 331 4006	IC LC7861KE
IC105	409 329 4209	IC UPD6379GR
L1401	645 001 4550	INDUCTOR,10U K
Q1101	405 006 1905	TR 2SA933S-S
or	405 006 1806	TR 2SA933S-R
or	405 057 7604	TR 2SA1175-FF
or	405 002 5402	TR 2SA1175-EF
Q1201	405 001 9302	TR 2SA1020-Y
Q1500	405 000 3400	TR DTC114TS
or	405 107 8704	TR BA1A4Z
Q1501	405 000 3400	TR DTC114TS
or	405 107 8704	TR BA1A4Z
X1401	614 231 2667	RESONATOR

MOTOR DRIVER P.W.BOARD ASSY

Ref. No.	Part No.	Description
122	614 266 1680	ASSY,PWB MOTOR DRIVER (N.S.P)
	614 271 2405	SPACER, FOR SAFETY
CN150	645 007 0051	PLUG,2P
or	645 005 7366	PLUG,2P
CN151	645 007 0105	PLUG,7P
or	645 006 0861	PLUG,7P
CN152	645 006 0045	PLUG,7P, YELLOW
CN153	645 007 0051	PLUG,2P
or	645 005 7366	PLUG,2P
CN156	614 227 7768	SOCKET
CN157	645 007 0068	PLUG,3P
or	645 005 7373	PLUG,3P
CN158	645 007 0051	PLUG,2P
or	645 005 7366	PLUG,2P
D1820	407 137 7306	ZENER DIODE MTZJ3.0A
D1821	407 144 4107	ZENER DIODE MTZJ2.7A
D1824	407 120 6309	ZENER DIODE MTZJ3.3A
IC181	409 127 1400	IC LB1648
IC182	409 127 1400	IC LB1648
Q1810	405 006 1905	TR 2SA933S-S
or	405 006 1806	TR 2SA933S-R
or	405 057 7604	TR 2SA1175-FF
or	405 002 5402	TR 2SA1175-EF
or	405 002 1305	TR 2SA1048-Y

Ref. No.	Part No.	Description
or	405 002 1107	TR 2SA1048-GR
Q1811	405 001 0309	TR RN1203
or	405 000 4407	TR DTC124ES
or	405 078 2800	TR BA1F4M

PLAY LED P.W.BOARD ASSY

Ref. No.	Part No.	Description
123	614 266 1697	ASSY,PWB PLAY LED (N.S.P)
	614 252 0956	COVER, SENSOR
CN191	645 009 6426	PLUG,2P
or	645 006 0908	PLUG,2P
D1817	408 018 8108	LED SRZ-935A-1-BC-T1

PLAY SENSOR P.W.BOARD ASSY

Ref. No.	Part No.	Description
124	614 266 1703	ASSY,PWB PLAY SENSOR (N.S.P)
	614 252 0956	COVER, PHOTO
CN190	645 005 8226	PLUG,3P
or	645 009 6433	PLUG,3P
D1836	407 159 6004	PHOTO DIODE PT380F

LOCK SLIDE SWITCH P.W.BOARD ASSY

Ref. No.	Part No.	Description
125	614 266 1628	ASSY,PWB LOCK SLIDE SWITCH (N.S.P)
CN183	645 009 6471	PLUG,7P, TO SIDE PWB
or	645 006 0946	PLUG,7P, TO SIDE PWB
CN184	645 009 6433	PLUG,3P, FROM SENSOR PWB
or	645 005 8226	PLUG,3P, FROM SENSOR PWB
D1803	407 012 4406	DIODE 1SS133, FOR FRONT RESET SW
or	407 153 6109	DIODE 1SS119-041, FOR FRONT RESET SW
or	407 007 9904	DIODE GMA01, FOR FRONT RESET SW
D1804	407 012 4406	DIODE 1SS133, FOR PLAY RESET SW
or	407 153 6109	DIODE 1SS119-041, FOR PLAY RESET SW
or	407 007 9904	DIODE GMA01, FOR PLAY RESET SW
S1803	614 249 1355	SWITCH,LEVER, DISC SLIDE RESRT (F)
S1804	614 249 1355	SWITCH,LEVER, DISC SLIDE RESET (P)

CHUCKING SWITCH P.W.BOARD ASSY

Ref. No.	Part No.	Description
126	614 266 1611	ASSY,PWB CHUCKING SWITCH (N.S.P)
CN181	645 007 0105	PLUG,7P, TO RELAY ON CK SW
or	645 006 0861	PLUG,7P, TO RELAY ON CK SW
CN182	645 007 0075	PLUG,4P, FROM CK & PL MOTOR
or	645 005 8110	PLUG,4P, FROM CK & PL MOTOR
D1801	407 012 4406	DIODE 1SS133, FOR CK OFF
or	407 153 6109	DIODE 1SS119-041, FOR CK OFF
or	407 007 9904	DIODE GMA01, FOR CK OFF
D1802	407 012 4406	DIODE 1SS133, FOR CK ON
or	407 153 6109	DIODE 1SS119-041, FOR CK ON
or	407 007 9904	DIODE GMA01, FOR CK ON
S1801	614 249 1355	SWITCH,LEVER, CHUCKING OFF
S1802	614 249 1355	SWITCH,LEVER, CHUCKING ON

PARTS LIST

TURNTABLE INITIAL SWITCH P.W.BOARD ASSY

Ref. No.	Part No.	Description
127	614 266 1642	ASSY,PWB TURNTABLE INITIAL SWITCH (N.S.P)
CN186	645 005 7366	PLUG,2P, TO SIDE PWB
or	645 007 0051	PLUG,2P, TO SIDE PWB
D1807	407 012 4406	DIODE 1SS133, FOR RESET SW
or	407 153 6109	DIODE 1SS119-041, FOR RESET SW
or	407 007 9904	DIODE GMA01, FOR RESET SW
S1807	645 012 5843	SWITCH,LEVER, INITIAL POSITION

DISK STOP SENSOR P.W.BOARD ASSY

Ref. No.	Part No.	Description
128	614 266 1635	ASSY,PWB DISK STOP SENSOR (N.S.P)
CN185	614 271 8162	ASSY,CONNECTOR-S, TO SLIDE SW PWB
or	614 224 9932	ASSY,CONNECTOR-S, TO SLIDE SW PWB
D1818	407 177 6109	PHOTO COUPLE GP1A53E, DT POSITION
R1801	401 026 9600	CARBON 470 JA 1/6W, FOR SENSOR

BASE MECHANISM SECTION (PM-CDBM94D2SP) ... N.S.P

Ref. No.	Part No.	Description
CM151	614 267 0408	ASSY,CHASSIS, BASE MECHA
CM152	614 277 8029	SHAFT, PICK UP RAIL
or	614 237 7024	SHAFT, PICK UP RAIL
CM153	614 262 2599	GEAR,RACK, PICK
CM154	614 238 6934	SPRING,COMP, PICK RACK GEAR
CM155	645 006 7983	PICKUP,LASER SF-P100
CM156	614 237 7116	GEAR, SLED
CM157	614 237 7109	GEAR, SLED RETARD 2
CM158	614 237 7093	GEAR, SLED RETARD 1
CM159	645 007 7814	ASSY,MOTOR CD-SLED
CM161	614 253 5295	ASSY,CONNECTOR-S, FROM MOTOR & SW
or	614 273 9570	ASSY,CONNECTOR-S, FROM MOTOR & SW
CM162	645 009 9953	FLEXIBLE FLAT CABLE, FROM PICKUP

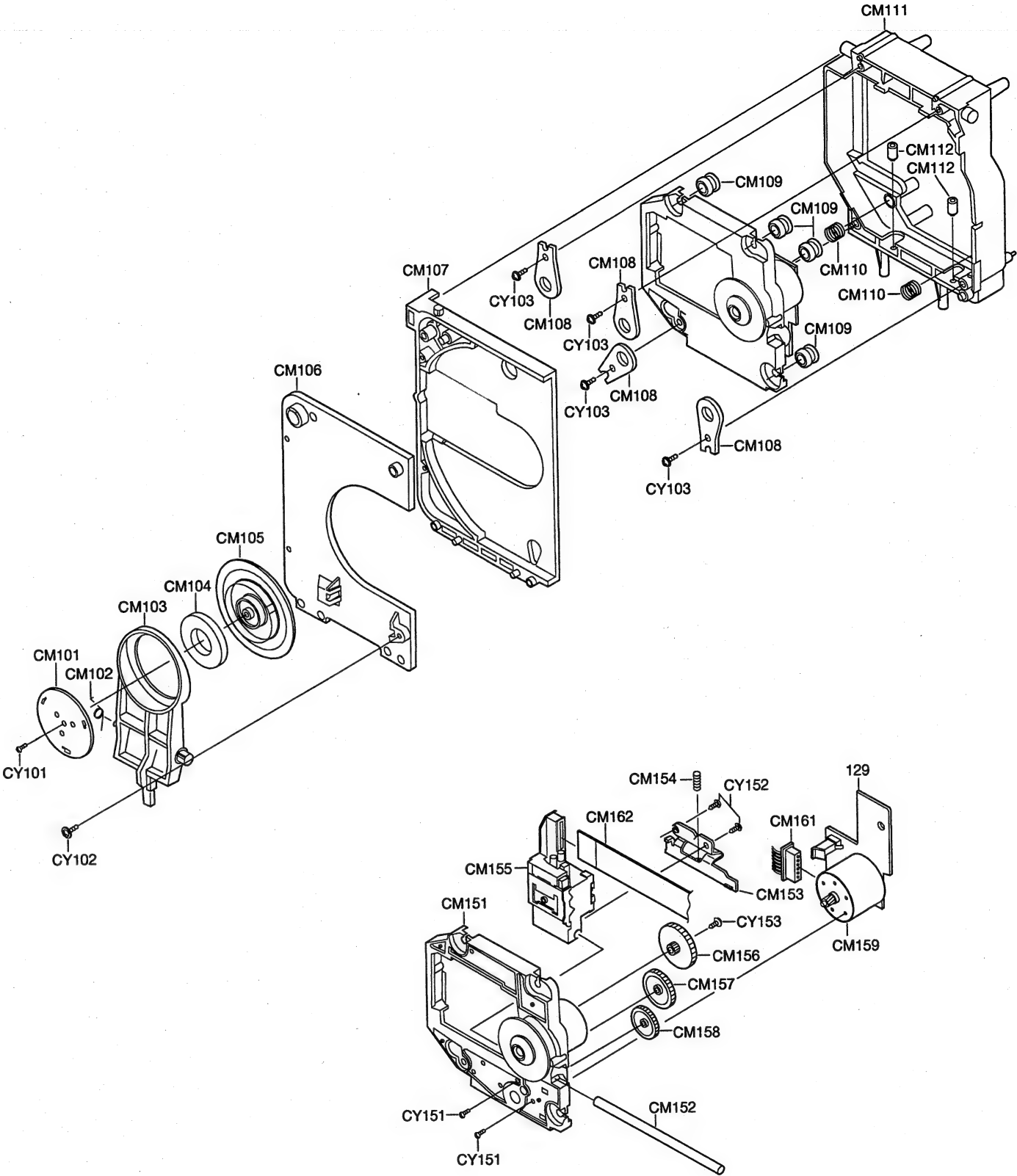
FIXING PARTS

Ref. No.	Part No.	Description
CY151	411 044 8004	SCR PAN+SW 2X8, SLED MOTOR FIX
CY152	411 152 4301	SCR S-TPG PAN PCS 1.7X6, PICK RACK GEAR FIX
CY153	412 054 6202	SPECIAL SCREW, SLED GEAR FIX

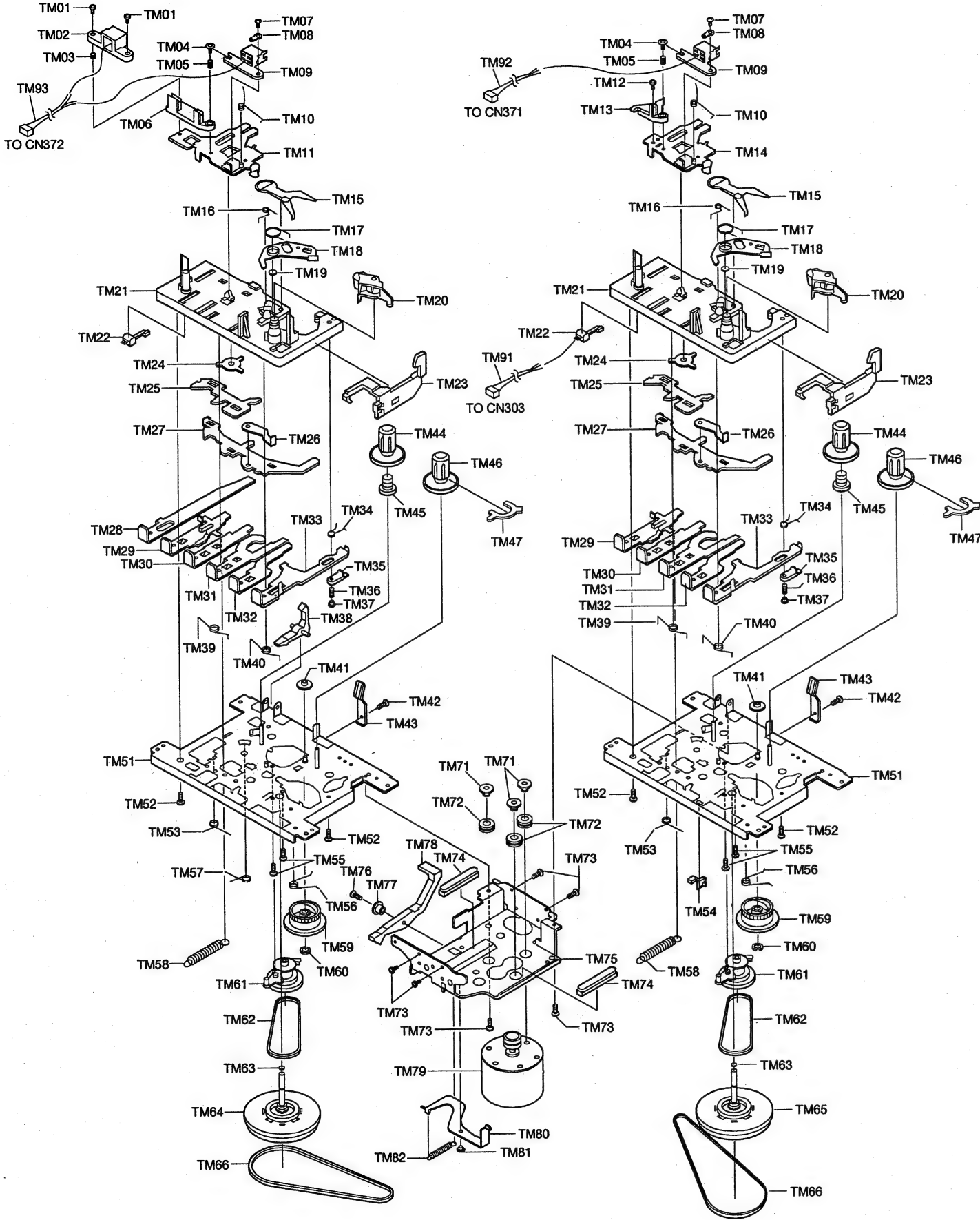
SPINDLE/SLED MOTOR P.W.BOARD ASSY

Ref. No.	Part No.	Description
129	614 251 6485	ASSY,PWB SPINDLE/SLED MOTOR (N.S.P)
CN001	645 009 6464	PLUG,6P, MOTOR PWB CONNECTOR
or	645 006 0939	PLUG,6P, MOTOR PWB CONNECTOR
S001	645 019 2661	SWITCH,LEAF, LIMIT SW
or	645 012 5836	SWITCH,LEAF, LIMIT SW

EXPLODED VIEW (CD BASE MECHANISM)



EXPLODED VIEW (TAPE MECHANISM)



PARTS LIST

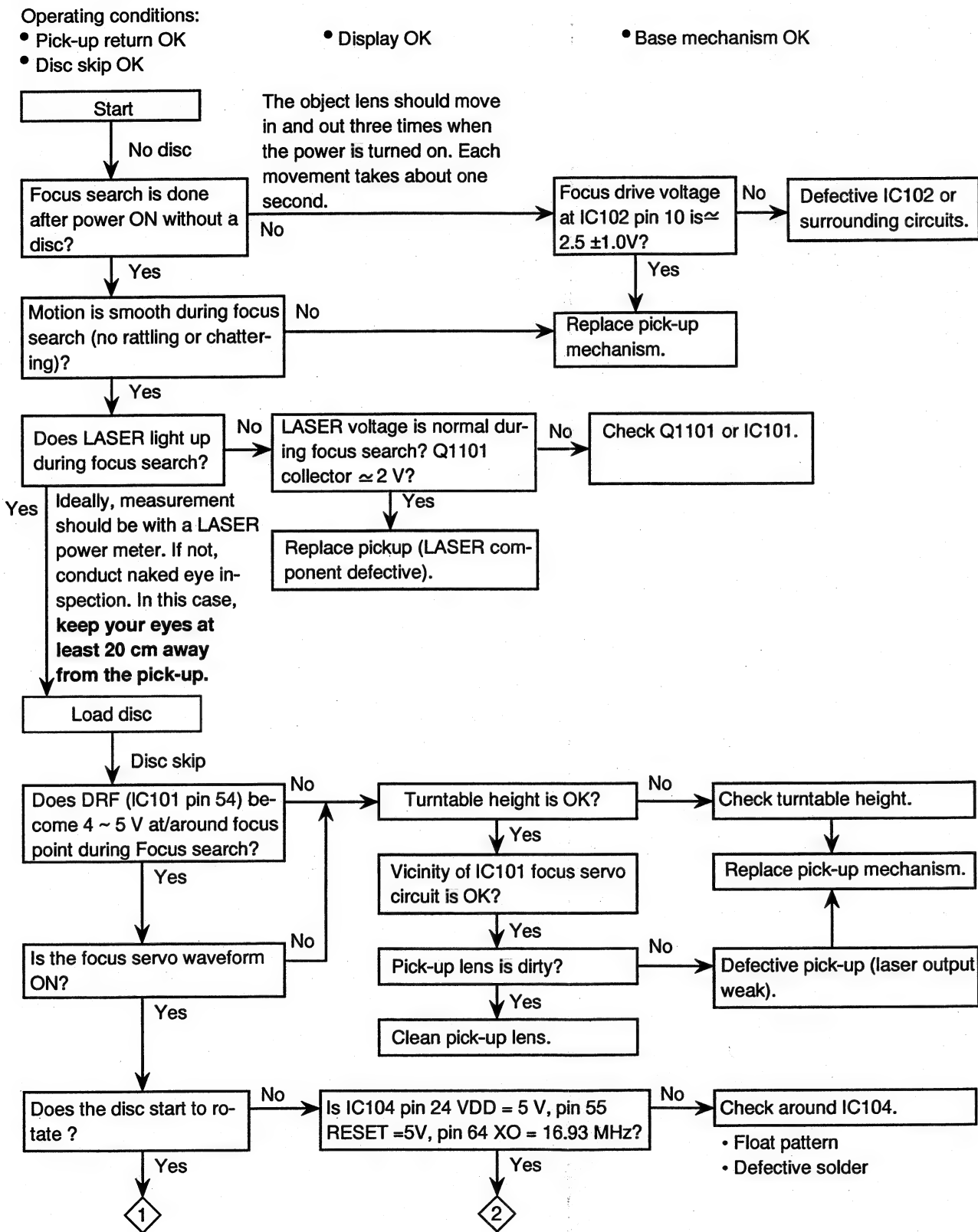
TAPE MECHANISM (TM-9415TN) ... N.S.P

Ref. No.	Part No.	Description
TM01	412 027 4600	SPECIAL SCREW, + CUP 2X8
TM02	614 021 8251	MAGNETIC HEAD, ERASE
TM03	614 151 5090	SPRING COIL, ERASE HEAD
TM04	412 026 1709	SPECIAL SCREW, AZIMUTH 2X7
TM05	614 151 7162	SPRING COIL, AZIMUTH
TM06	614 196 0470	BRACKET HEAD, PANEL
TM07	412 004 3701	SPECIAL SCREW, + BIND 2X3
TM08	614 208 0276	LUG, S2X4
TM09	614 221 0277	HEAD, REC/PLAY AND PLAY
TM10	614 210 3432	SPRING WIRE, PANEL(P)
TM11	614 210 6822	SLIDE, HEAD PANEL
TM12	412 026 1501	SPECIAL SCREW, + 2X6
TM13	614 146 5111	BRACKET TAPE GUIDE, HEAD BASE
TM14	614 211 6944	SLIDE, HEAD PANEL
TM15	614 140 1614	LEVER, SENSING
TM16	614 152 1299	SPRING WIRE, MAIN CONTROL
TM17	614 151 8312	SPRING PLATE, GEAR
TM18	614 070 0916	LEVER ASSY, GEAR PLATE CALKING
TM19	412 026 1808	SPECIAL WASHER, POLY SW 1.45X3.8X0.5
TM20	614 237 2371	ASSY, PINCH ROLLER, ARM
TM21	614 067 3258	SUB CHASSIS ASSY, BASE METAL
TM22	645 011 5080	SWITCH, LEAF, MSW-1541T
TM23	614 205 1313	LEVER, ERASE SLIDE
TM24	614 129 0676	BOSS, REC/PLAY STOPPER
TM25	614 201 1744	SLIDE, SW ACTUATOR
TM26	614 140 1539	LEVER, EJECT KICK
TM27	614 139 1120	SLIDE, PUSH BUTTON ACTUATOR
TM28	614 196 0500	LEVER, REC BUTTON
TM29	614 196 0555	LEVER, PLAY BUTTON
TM30	614 196 0517	LEVER, RWD BUTTON
TM31	614 196 0524	LEVER, FF BUTTON
TM32	614 196 0531	LEVER, STOP BUTTON
TM33	614 208 0313	LEVER, PAUSE BUTTON
TM34	614 152 1244	SPRING WIRE, PAUSE CONTROL
TM35	614 208 0320	LEVER, PAUSE
TM36	614 151 7186	SPRING COIL, PAUSE LEVER
TM37	614 129 0669	BOSS, PAUSE STOPPER
TM38	614 140 1508	LEVER, REC SAFETY
TM39	614 152 1251	SPRING WIRE, BUTTON LEVER A
TM40	614 152 1268	SPRING WIRE, BUTTON LEVER B
TM41	614 134 9046	GEAR, FAST FORWARD
TM42	412 026 2003	SPECIAL SCREW, C TAPPING M2X4
TM43	614 151 8299	SPRING PLATE, PACK
TM44	614 204 5695	REEL ASSY, SUPPLY
TM45	614 208 0351	SPRING, COMP, BACK TENSION
TM46	614 204 5701	REEL ASSY, TAKE UP
TM47	614 195 5094	LEVER, SENSOR
TM51	614 067 2770	CHASSIS ASSY
TM52	412 026 2201	SPECIAL SCREW, P TITE BIND 2X5
TM53	614 152 1282	SPRING WIRE, PLAY/STOP LEVER
TM54	645 011 4731	SWITCH, LEAF, PLAY
TM55	412 026 2300	SPECIAL SCREW, CAMERA TAPPING
TM56	614 152 1275	SPRING WIRE, EJECT ACTUATOR
TM57	614 152 1305	SPRING WIRE, REC BUTTON
TM58	614 151 4703	SPRING COIL, PLAY BUTTON LEVER (S)
TM59	614 134 9053	GEAR, CAM
TM60	412 013 5000	SPECIAL WASHER, POLY 1.2X3.8X0.3
TM61	614 069 2273	PULLEY ASSY, REVERSE/FORWARD
TM62	614 195 5087	SQUARE BELT, FEVERSE/FORWARD
TM63	412 026 2508	SPECIAL WASHER, POLY W2X3.5X0.3
TM64	614 068 1871	FLYWHEEL DISC ASSY
TM65	614 196 0197	FLYWHEEL DISC ASSY
TM66	614 234 1377	BELT, SQUARE, MAIN

Ref. No.	Part No.	Description
TM71	412 026 1907	SPECIAL SCREW, M COLLAR
TM72	614 126 6831	CUSHION, MOTOR RUBBER
TM73	412 026 2003	SPECIAL SCREW, +C TITE 2X4
TM74	614 126 6848	CUSHION, ANTI VIBRATION
TM75	614 122 9553	BRACKET MOTOR
TM76	412 031 7901	SPECIAL SCREW, C TITE 2X6
TM77	614 129 0683	BOSS, COLLAR B
TM78	614 140 1676	LEVER, PLAY KICK B
TM79	614 234 0929	ASSY, MOTOR WITH PULLEY
TM80	614 139 8679	LEVER, PLAY KICK A
TM81	412 005 8101	SPECIAL SCREW, PK COLLAR A
TM82	614 151 4758	SPRING COIL, PLAY KICK LEVER
TM91	614 249 4660	ASSY, CONNECTOR-S, MECHA, LEAD
TM92	614 248 9086	ASSY, CONNECTOR-S, PLAY, LEAD
TM93	614 246 6438	ASSY, CONNECTOR-S, R/P, LEAD

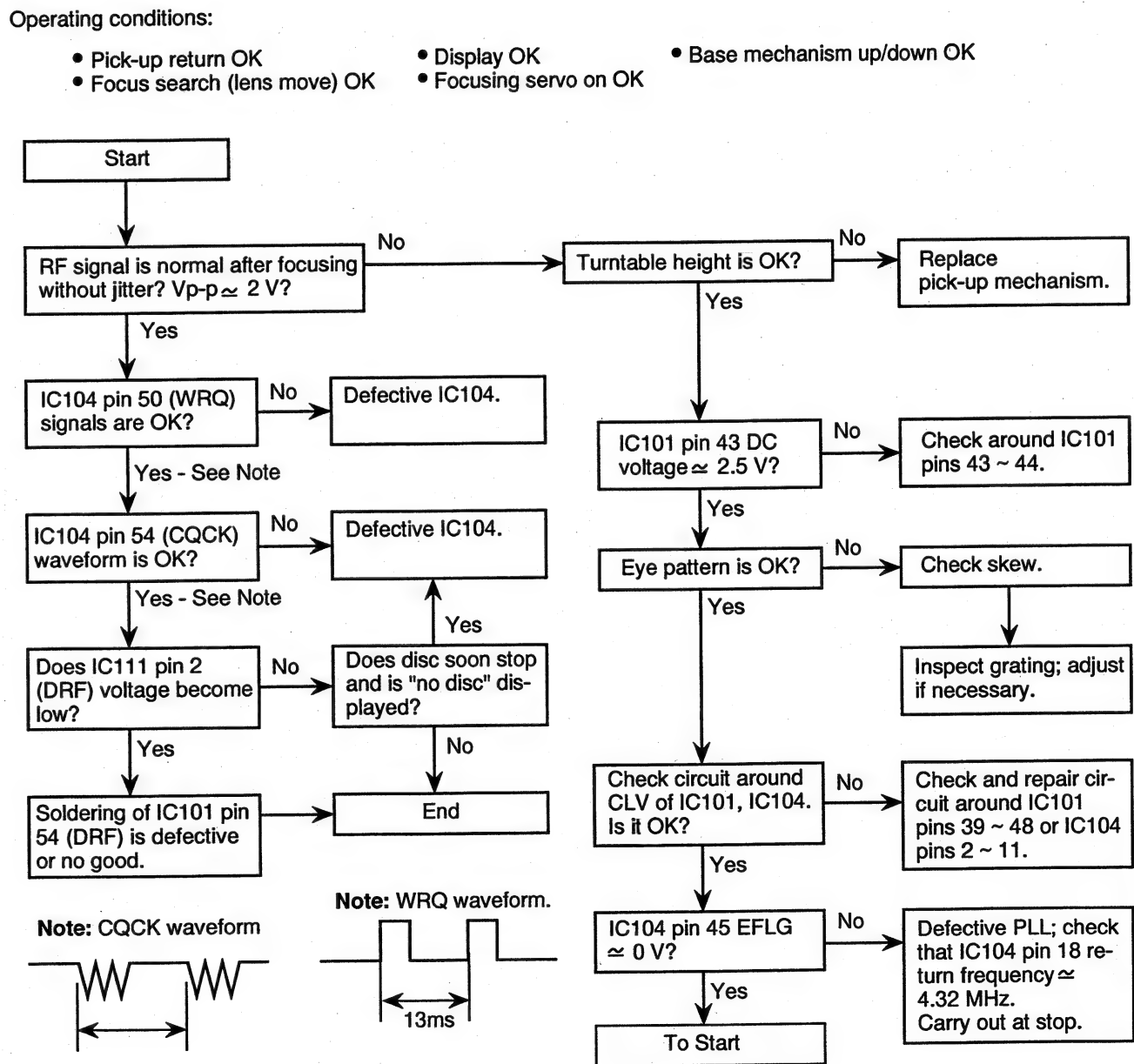
TROUBLESHOOTING GUIDE (CD SECTION)

1. Defective Focus Search of CD (1)
(No Disc Rotation. NO DISC appears on the display.)



TROUBLESHOOTING GUIDE (CD SECTION)

2. Defective Focus Search of CD (2)
(Disc rotates but soon stops. NO DISC is displayed)



TROUBLESHOOTING GUIDE (CD SECTION)

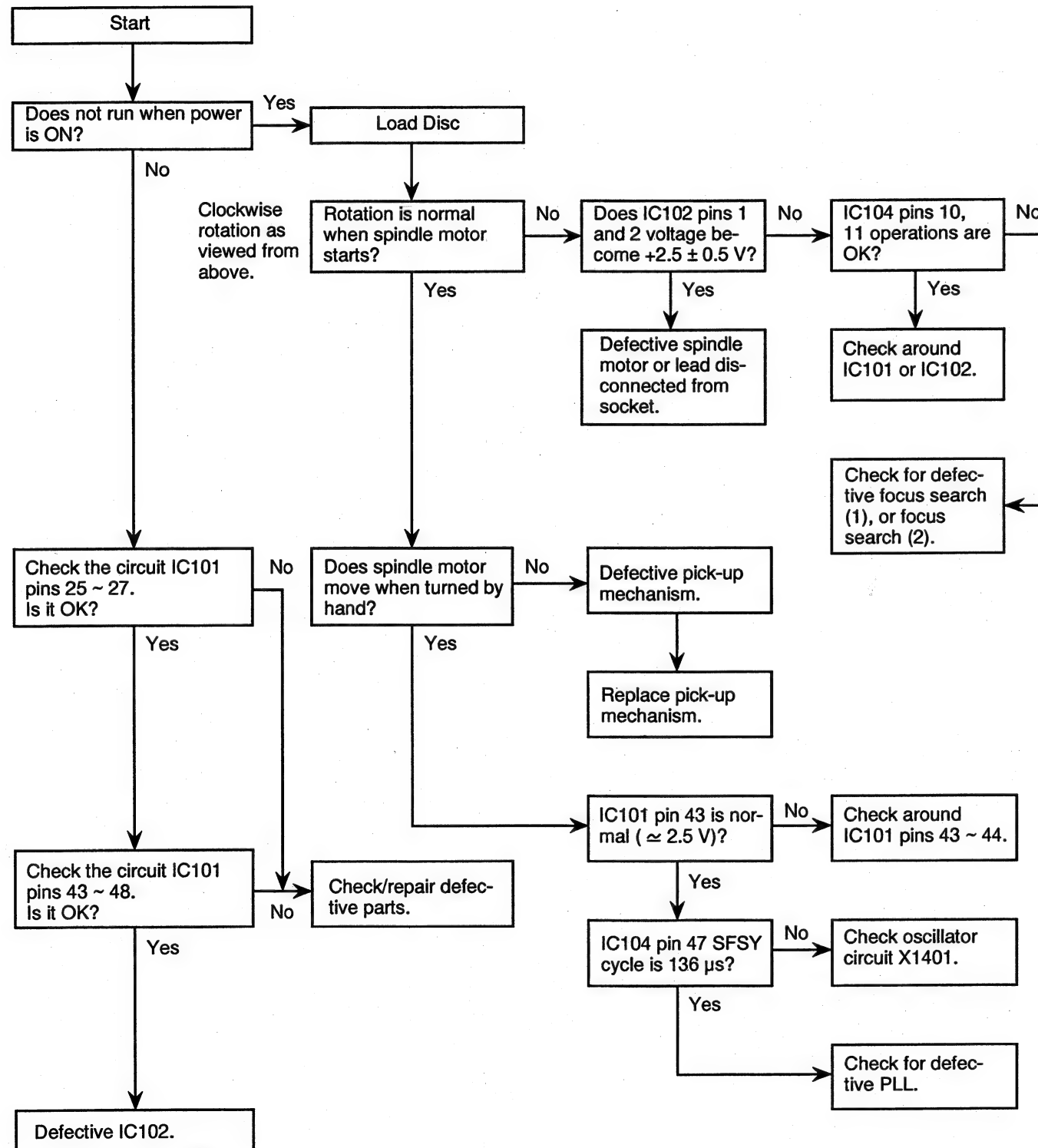
3. Defective Spindle Motor Rotation of CD

Operating conditions:

- Pick-up return OK
- Focus search (lens move) OK

- Display OK
- Focusing servo on OK

- X_RST = 5V OK
- Tracking servo on OK



TROUBLESHOOTING GUIDE (CD SECTION)

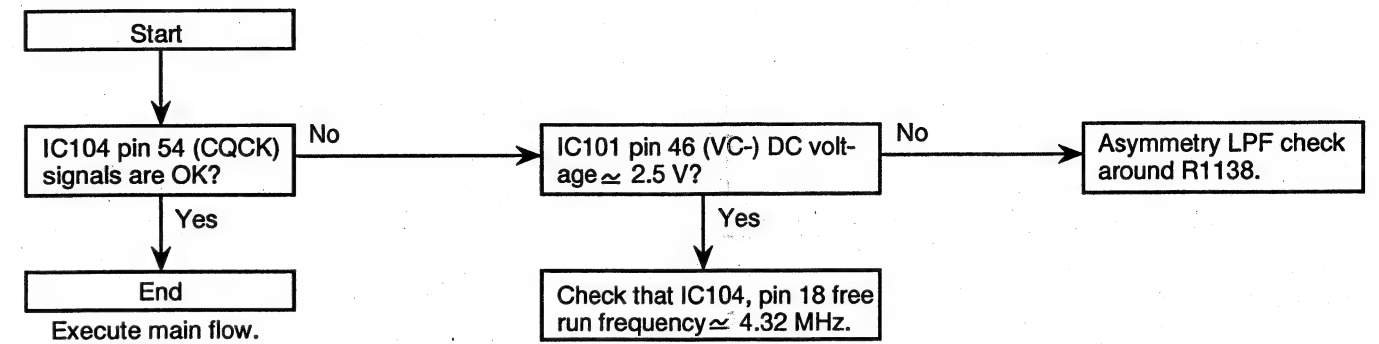
4. Defective PLL of CD

Operating conditions:

- Pick-up return OK
- Focus search (lens move) OK

- Sled servo on OK
- Tracking servo on OK

- Focusing servo on OK



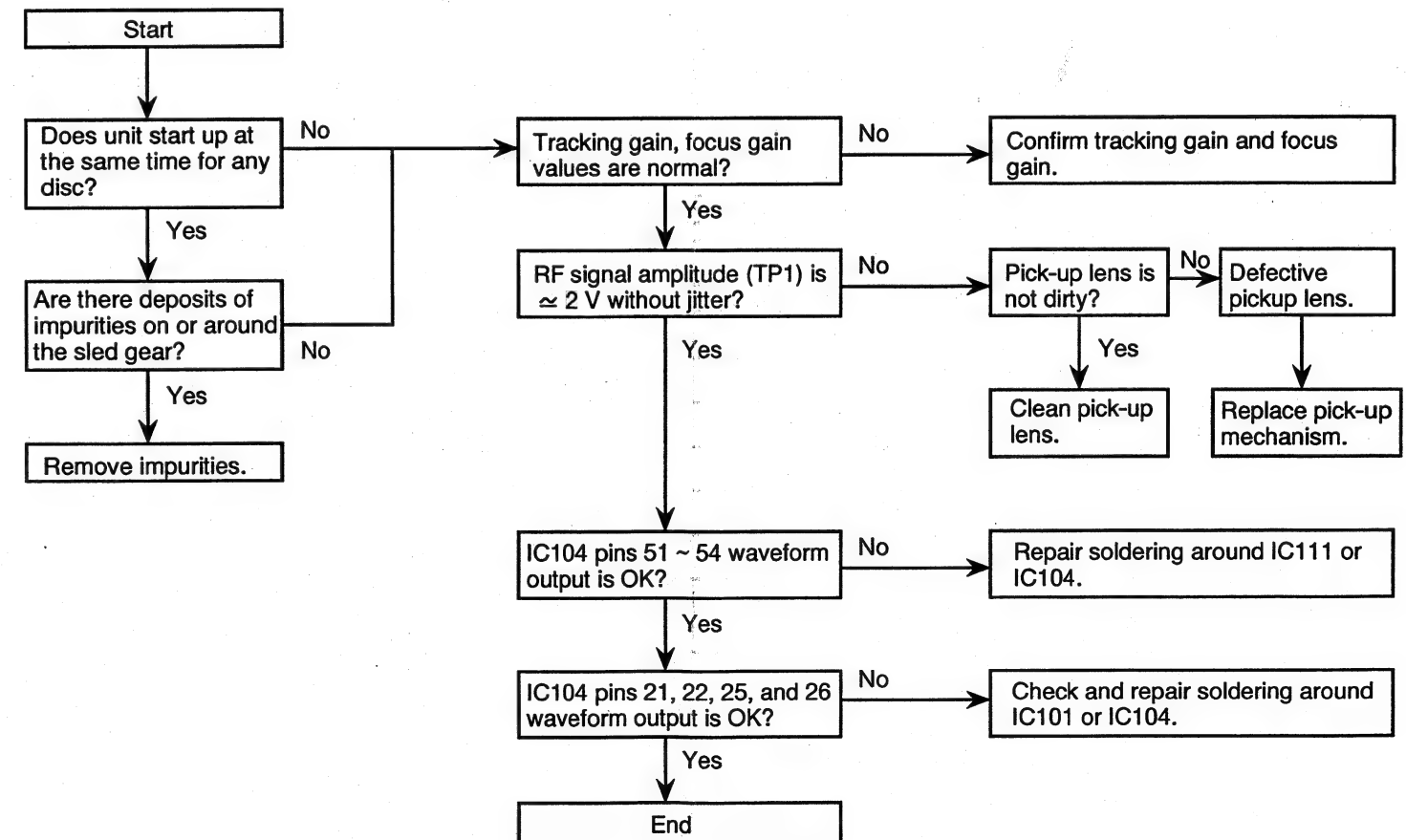
5. Track jumping of CD

Operating conditions:

- Pick-up return OK
- Disc change OK
- Focusing servo on OK

- Sled servo on OK
- Focus search (lens move) OK
- Tracking servo on OK

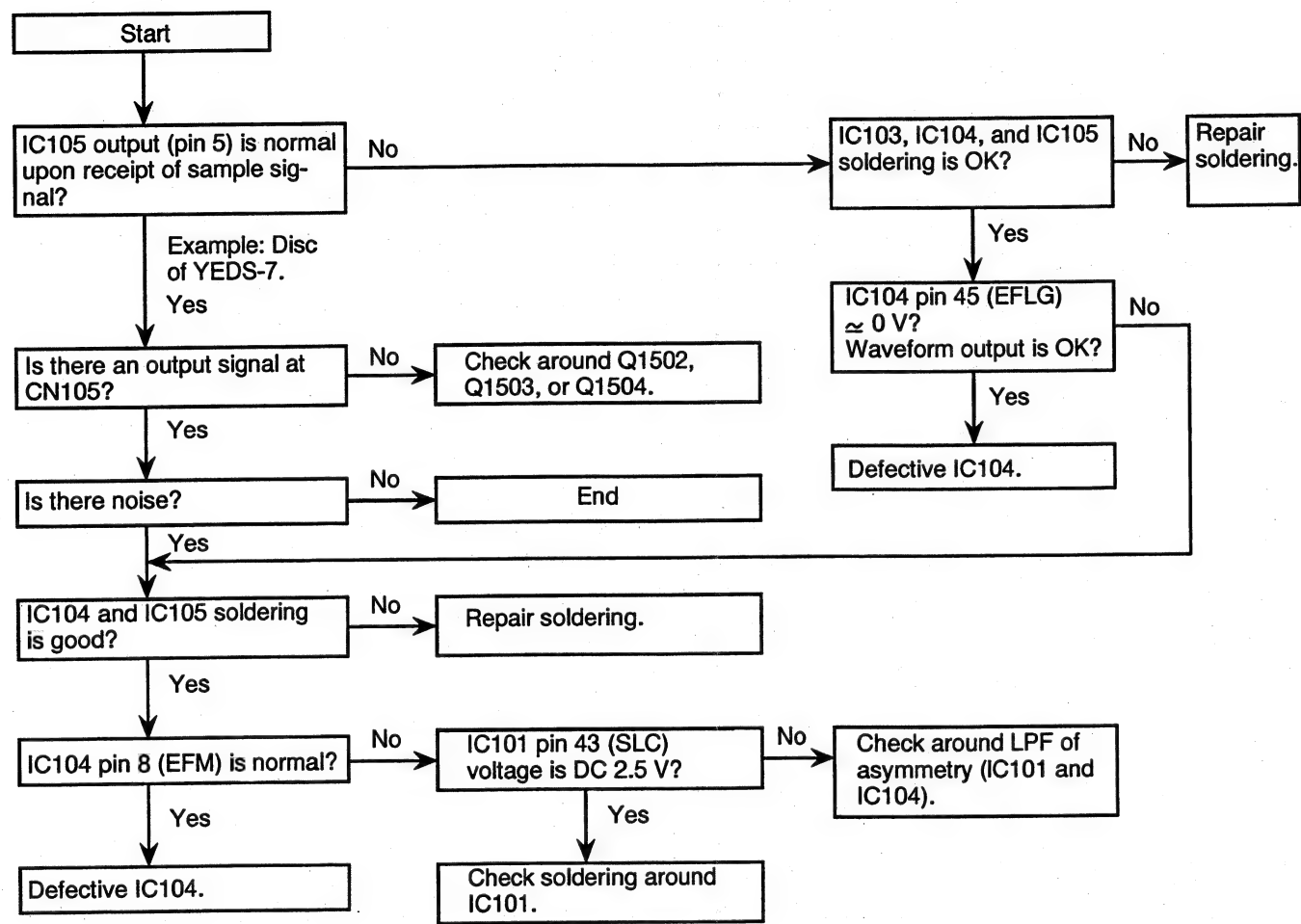
- Display OK



TROUBLESHOOTING GUIDE (CD SECTION)

6. Defective Sound of CD
(Sound is absent or distorted.)

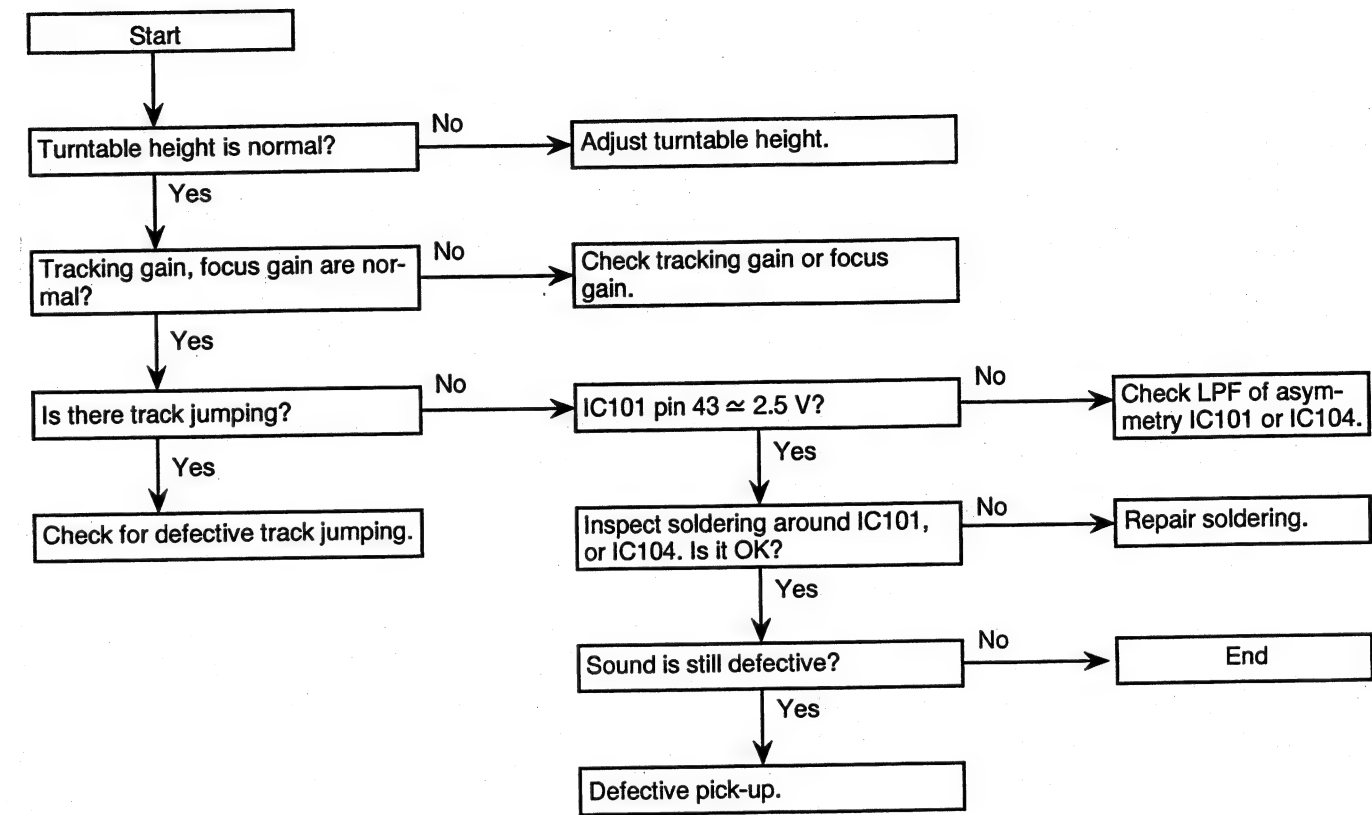
Operating conditions:
• Pick-up return OK • Normal eye pattern, RF signal OK • Display OK



TROUBLESHOOTING GUIDE (CD SECTION)

7. Defective Sound of CD
(Sound is absent or distorted.)

Operating conditions:
• Pick-up return OK • Eye pattern defective • Display OK



IC BLOCK DIAGRAM & DESCRIPTION

IC101 LA9220M (SERVO SIGNAL PROCESSOR)

No	PIN NAME	I/O	DESCRIPTION	No	PIN NAME	I/O	DESCRIPTION
1	FIN2	I	Connection Pin for Photo Diode of Pick-up.	35	TOFF	I	Input Pin for Tracking Off Control Signal from Digital Signal Processor. TOFF = H: Off
2	FIN1	I	FIN2 + FIN1 = RF, FIN2-FIN1 = FE	36	TES	O	Output Pin for Track Error Sense Signal to Digital Signal Processor.
3	E	I	Connection Pin for Photo Diode of Pick-up.	37	HFL	I	High Frequency Level Signal use Detection
4	F	I	E-F = TE	38	SLOF	I	Input Pin for Sled Servo Off Control.
5	TB	I	Input Pin for DC ingredient of TE Signal.	39	CV -	I	Input Pin for Constant Linear Velocity
6	TE-	I	Connection Pin for Gain Setting Resistor of TE Signal to TE Signal pin.	40	CV +	I	Error Signal from Digital Signal Processor.
7	TE	O	Output Pin for Tracking Error Signal .	41	RFSM	O	Output Pin for RF Signal.
8	TESI	I	Input Pin for Track Error Sense Comparator. TE Signal through Band pass, and Inputted.	42	RFS-	I	Connection Pin for Gain Setting of RF and Constant Setting of 3T Compensation of the EFM Signal with RFSM Pin.
9	SCI	I	Input Pin for Shock Detection.	43	SLC	O	Slice Level Control Signal is Output Pin, It Control Level of Data-Slice by Digital Signal Processor of the RF Waveform.
10	TH	I	Connection Pin for Time Constant Setting of Tracking Gain.	44	SLI	I	Input Pin for Level Control of Data-Slice by Digital Signal Processor.
11	TA	O	Output Pin for TA Amplifier.	45	DGND	-	Ground for Digital Signal.
12	TD-	I	Connection Pin for Constant of Tracking Phase Compensation, Consist of between TD and VR.	46	VC-	I	Input Pin For VCO Control Amplifier, Consist of PLL Loop Filter with VCOC and PDO of Digital Signal Processor.
13	TD	I	Connection Pin for Constant of Tracking Phase Compensation.	47	VCOC	O	Output Pin for VCO Control Signal.
14	JP	I	Connection Pin for Amplitude Setting of Tracking Jump (Kick Pulse) Signal.	48	VCO	O	Output Pin for VCO Signal.
15	TO	O	Output Pin for Tracking Control Signal.	49	DEF	O	Output Pin for Defect Detection of Disc.
16	FD	O	Output Pin for Focusing Control Signal.	50	CLK	I	Input Pin for Reference Clock Pulse, Input 4.23 MHz of Digital Signal Processor.
17	FD-	I	Connection Pin for Constant of Focusing Phase Compensation, Consist of between FD and FA.	51	CL	I	Input Pin of Clock Pulse for Command from Micro Processor.
18	FA +	I	Connection Pin for Constant of Focusing Phase Compensation, Consist of between FD- and FA-.	52	DAT	I	Input Pin of Data for Command from Micro Processor.
19	FA-	I	Connection Pin for Constant of Focusing Phase Compensation, Consist of between FA and FE.	53	CE	I	Input Pin of Chip Enable for Command from Micro Processor.
20	FE	O	Output Pin for Focusing Error Signal.	54	DRF	O	Detect RF Signal is Output Pin for RF Level Detection.
21	FE-	I	Connection Pin for Gain Setting Resistor of FE Signal to FE Signal pin.	55	LF	I	Connection Pin for Adjusting of VCO Free-run.
22	AGND	-	Ground for Analog Signal.	56	VCC2	-	VCC for Servo and Digital Root.
23	SP	O	Output Pin for Single End of Input Signal of the CV + , CV- Pin.	57	REFI	I	Bus Control Connection Pin for Reference Voltage.
24	SPI	I	Input Pin for Spindle Amplifier.	58	VR	O	Output Pin for Reference Voltage.
25	SPG	I	Connection Pin for Gain Setting Resistor, when Spindle 12 cm Mode.	59	LF2	I	Connection Pin for Time Constant Setting of Defect Detection of the Disc.
26	SP-	I	Connection Pin for Constant of Spindle Phase Compensation with SPD Pin.	60	PH1	I	Capacitor Connection Pin for Peak-hold of RF Signal.
27	SPD	O	Output Pin for Spindle Control Signal.	61	BH1	I	Capacitor Connection Pin for Bottom-hold of RF Signal.
28	SLEQ	I	Connection Pin for Constant of Sled Phase Compensation.	62	LDD	O	Output Pin of APC (Automatic Power Control) Circuit.
29	SLD	O	Output Pin for Sled Control Signal.	63	LDS	I	Input Pin of APC (Automatic Power Control) Circuit.
30	SL-	I	Input Pin for Sled Signal from Micro Processor.	64	VCC1	I	VCC for RF Root
31	SL +	I					
32	JP-	I	Input Pin for Tracking Jump Signal from Digital Signal Processor.				
33	JP +	I					
34	TGL	I	Input Pin for Tracking Gain Control Signal from Digital Signal Processor. TGL = H: Gain Low				

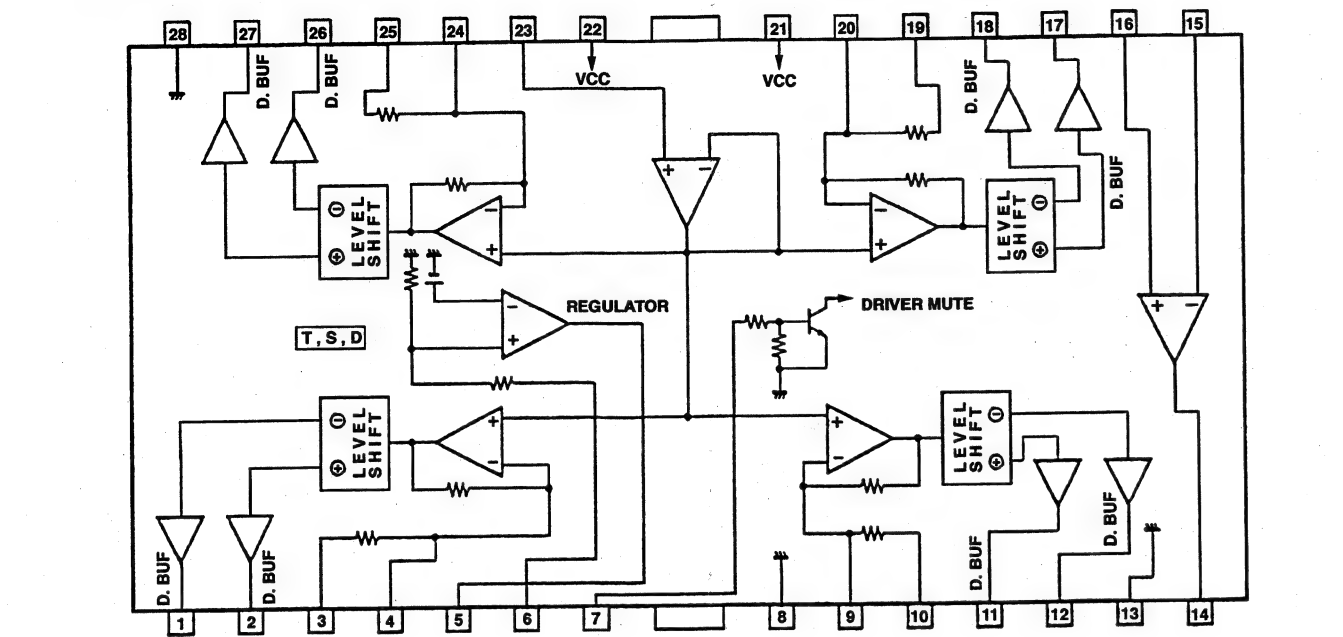
IC BLOCK DIAGRAM & DESCRIPTION

IC111 CXP82432A-115Q (MICROPROCESSOR)

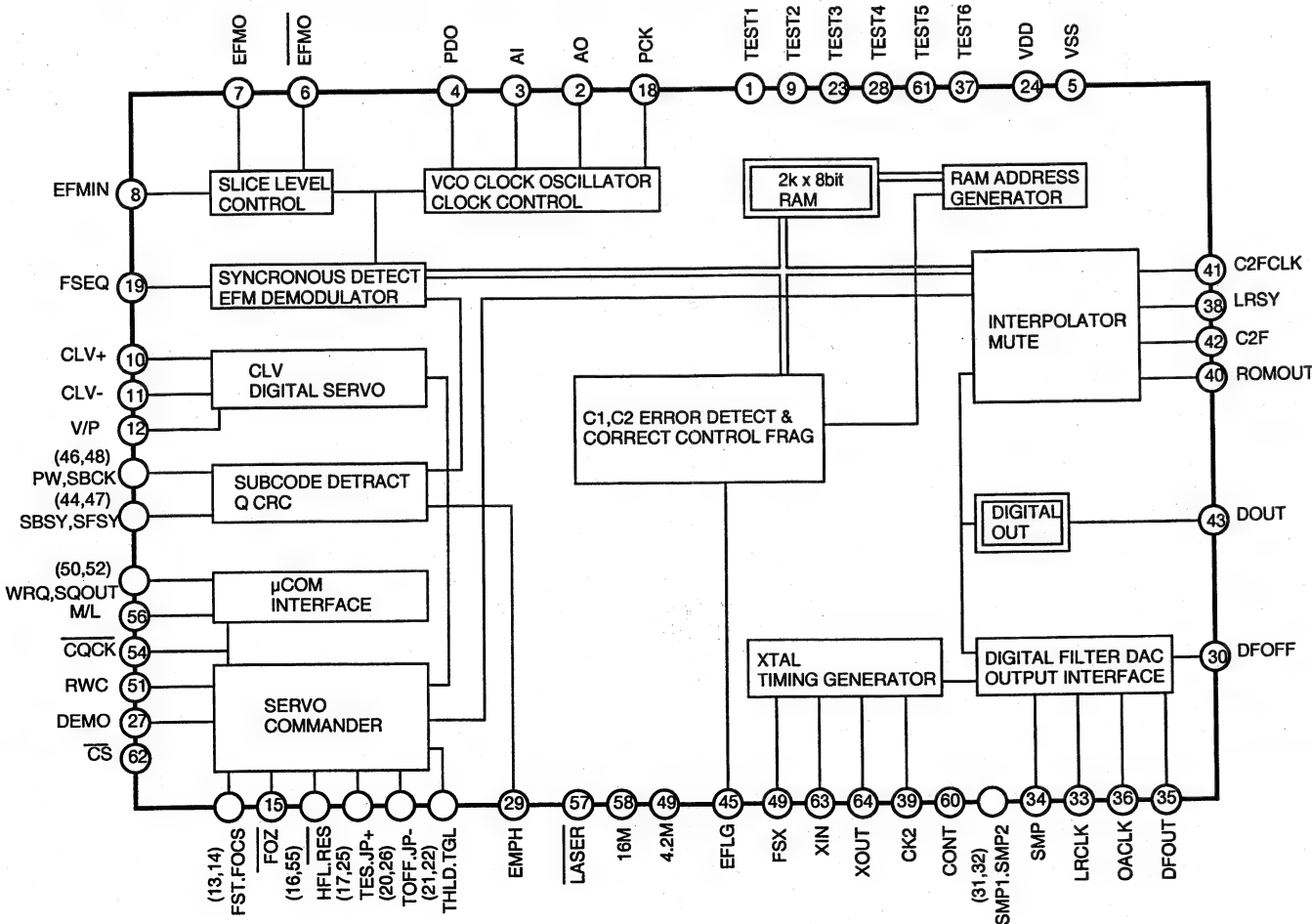
No.	PIN NAME	I/O	DESCRIPTION	No.	PIN NAME	I/O	DESCRIPTION
1	WRQ	I	DSP INTERFACE	51	S0	O	FL DISPLAY, SEGMENT
2	DRF	I	DRF SIGNAL	52	S1	O	FL DISPLAY, SEGMENT
3	PHOTO	I	60-DISC TABLE POSITION SENSOR	53	S2	O	FL DISPLAY, SEGMENT
4	IR	I	REMOTE CONTROL SIGNAL	54	S3	O	FL DISPLAY, SEGMENT
5	SENS1	I	DISC SENSOR, LOADING	55	S4	O	FL DISPLAY, SEGMENT
6	M_EJECT+	O	EJECT MOTOR	56	S5	O	FL DISPLAY, SEGMENT
7	M_EJECT-	O	EJECT MOTOR	57	S6	O	FL DISPLAY, SEGMENT
8	M_CHUCK+	O	CHUCKING MOTOR CONTROL	58	S7	O	FL DISPLAY, SEGMENT
9	M_CHUCK-	O	CHUCKING MOTOR CONTROL	59	S8	O	FL DISPLAY, SEGMENT
10	M_LOAD+	O	PLAY LOADING MOTOR	60	S9	O	FL DISPLAY, SEGMENT
11	M_LOAD-	O	PLAY LOADING MOTOR	61	S10	O	FL DISPLAY, SEGMENT
12	SEN_P	O	SENSOR POWER CONTROL	62	S11	O	FL DISPLAY, SEGMENT
13	CQCK	O	DSP CLOCK	63	S12	O	FL DISPLAY, SEGMENT
14	SQOUT	I	DSP INTERFACE	64	S13	O	FL DISPLAY, SEGMENT
15	COIN	O	DSP INTERFACE	65	S14	O	FL DISPLAY, SEGMENT
16	MEC0	I	MECHANISM SWITCH, SWITCHING	66	S15	O	FL DISPLAY, SEGMENT
17	MEC1	I	MECHANISM SWITCH, SWITCHING	67	S16	O	FL DISPLAY, SEGMENT
18	CD_MUTE	O	CD MUTE (MUTE ON = "H")	68	S17	O	FL DISPLAY, SEGMENT
19	TU_CE	O	TUNER IC CONROL	69	S18	O	FL DISPLAY, SEGMENT
20	TU_CLK	O	TUNER IC CONROL	70	S19	O	FL DISPLAY, SEGMENT
21	TU_DATA	O	TUNER IC CONROL	71	S20	O	FL DISPLAY, SEGMENT
22	VOL_LED	O	VOLUME LED (ON = "L")	72	S21	O	FL DISPLAY, SEGMENT
23	V_CHK	I	VOLTAGE CHECK, FAILURE	73	S22	O	FL DISPLAY, SEGMENT
24	REC_SW	I	RECORDING SWITCH SIGNAL	74	S23	O	FL DISPLAY, SEGMENT
25	SYNPRO	O	SYNPRO PLAY,TAPE MECHANISM	75	T12	O	FL DISPLAY, DIGIT
26	SP PROTECT	I	POWER AMP PROTECT, NORMAL= "H"	76	T11	O	FL DISPLAY, DIGIT
27	FA	O	FUNCTION, A	77	T10	O	FL DISPLAY, DIGIT
28	FB	O	FUNCTION, B	78	T9	O	FL DISPLAY, DIGIT
29	FC	O	FUNCTION, C	79	T8	O	FL DISPLAY, DIGIT
30	PH6	O		80	T7	O	FL DISPLAY, DIGIT
31	SP_RY	O	SPEAKER RELAY ON = "H"	81	T6	O	FL DISPLAY, DIGIT
32	TU_SD/ST	I	TUNER, STATION = " L" , STEREO = " L"	82	T5	O	FL DISPLAY, DIGIT
33	TU_SEL	I	TUNER SELECT	83	T4	O	FL DISPLAY, DIGIT
34	KEY0	I	KEY INPUT	84	T3	O	FL DISPLAY, DIGIT
35	KEY1	I	KEY INPUT	85	T2	O	FL DISPLAY, DIGIT
36	KEY2	I	KEY INPUT	86	T1	O	FL DISPLAY, DIGIT
37	KEY3	I	KEY INPUT	87	T0	O	FL DISPLAY, DIGIT
38	RESET	-	RESET	88	VFDP	-	-30V
39	EXTAL	-	X'TAL, 4.19MHz	89	VDD	-	+5V
40	XTAL	-	X'TAL, 4.19MHz	90	NC	-	VDD
41	VSS	-	GND	91	VSS	-	GND
42	TX	-		92	ROM_DATA	I/O	ROM CONTROL DATA
43	TEX	-	GND	93	ROM_CLK	O	ROM CONTROL DATA
44	- 40dB MUTE	O	MUTE,- 40dB ON = "H"	94	DSP_RES	O	DSP RESET CONTROL
45	- ∞ MUTE	O	MUTE -∞ ON="H"	95	SL +	O	SLED MOTOR CONTROL
46	AVREF	-	REFERENCE VOLTAGE, A/D CONVERTER	96	RWC	O	DSP INTERFACE
47	AVSS	-	GND	97	SL -	O	SLED MOTOR CONTROL
48	VOL_UP	O	VOLUME CONTROL "UP"	98	M_TURN+	O	TURNABLE MOTOR CONTROL
49	VOL_DOWN	O	VOLUME CONTROL "DOWN"	99	M_TURN-	O	TURNABLE MOTOR CONTROL
50	POWER_RY	O	POWER RELAY	100	LIMIT_SW	I	PICK-UP LIMIT SWITCH

IC BLOCK DIAGRAM & DESCRIPTION

IC102 BA6398FP (POWER DRIVER)



IC104 LC7861KE (CD PLAYER SIGNAL & SERVO CONTROL)



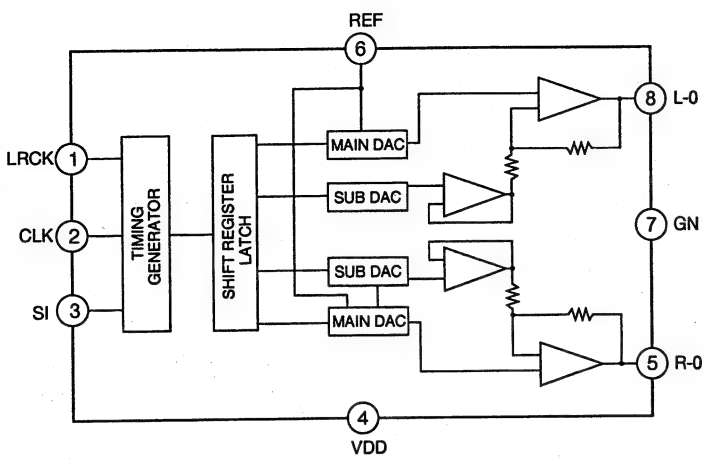
IC BLOCK DIAGRAM & DESCRIPTION

IC104 LC7861KE (CD PLAYER SIGNAL & SERVO CONTROL)

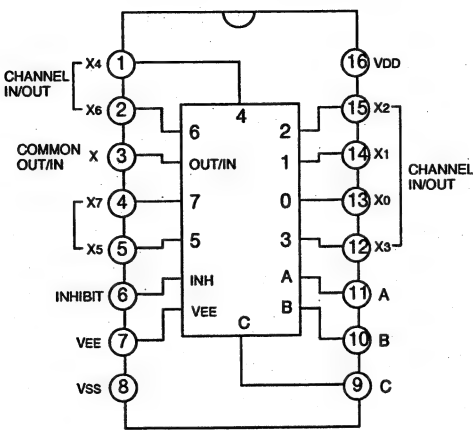
N O	PIN NAME	I/O	DESCRIPTION	N O	PIN NAME	I/O	DESCRIPTION
1	TEST1	I	For TEST. Normal time is non connection.	33	LRCLK	O	Output of signal to DAC, Signal of Latch & L/
2	AO	O	Input from VCO output in LA9210.(8.6436MHz)	34	SMP	O	R select, Signal for Sampling Hold
3	AI	I	Phase comparison output of VCO and EFM	35	DFOUT	O	Output of signal to DAC, Signal of Latch & L/
4	PDO	O	signal.	36	DACLK	O	Output of signal to DAC, Signal of Latch & L/
5	VSS		GND	37	DFIN	O	For TEST. Normal time is non connection.
6	EFMO	O	Negative output through amplitude limiter. Antiphase of EFMO. This signal use SLICE LEVEL CONTROL.	38	LRSY	O	For output of signal that Comply with CD-ROM
7	EFMO	O	Positive output through amplitude limiter. Antiphase of EFMO. This signal use SLICE LEVEL CONTROL.	39	CK2	O	For output of signal that Comply with CD-ROM
8	EFMIN	I	Inputting HF signal of 1~2Vp_p. This signal use SLICE LEVEL CONTROL.	40	ROMOUT	O	For output of signal that Comply with CD-ROM
9	TEST2	I	For TEST. Normal time is non connection.	41	C2FLCK	O	For output of signal that Comply with CD-ROM
10	CLV +	O	Output for DISC MOTOR CONTROL.	42	C2F	O	For output of signal that Comply with CD-ROM
11	CLV-	O	Output for DISC MOTOR CONTROL.	43	DOUT	O	Output of DIGITAL OUT
12	V/P	O	CLV rough Servo time : Output "H" Phase control time : Output "L"	44	SBSY	O	Synchronizing signal of sub-code block.
13	FOCS	O	Output "H" : Lens pull up with slowly than	45	EFLG	O	For correction monitor of C1, C2, single, double.
14	FST	O	stop the Focus Servo. If FZD generate, it reset	46	PW	O	SFSY is Synchronizing signal of sub-code &
15	FZD	I	output of FOCS. For lead-in of Focus.	47	SFSY	O	frame. Clock of eighth send to SBCK then read
16	HFL	I	Comply with command of track jump, it oscillate kick Pulse, JP+ & JP-. It jump the prescribed number of track (1,4,16,64).	48	SBCK	I	out the sub-code of P, Q, R, S, T, U, V, & W.
17	TES	I	Comply with command of track jump, it oscillate kick Pulse, JP+ & JP-. It jump the prescribed number of track (1,4,16,64).	49	FSX	O	Output of Synchronizing signal (7.35KHz)
18	PCK	O	PCK Monitor (4.3218MHz)	50	WRQ	O	Data sub-code Q pass the CRC check then
19	FSEQ	O	SYNC(FS of truth) detected from EFM signal = SYNC of counter : "H" (Latch Output during in 1 frame)	51	RWC	I	WRQ do "H". It detect at external, Data read
20	TOFF	O	Comply with command of track jump, it oscillate kick Pulse, JP+ & JP-. It jump the prescribed number of track (1,4,16,64).	52	SQOUT	O	out from SQOUT by send the CQCK. RWC set
21	TGL	O	oscillate kick Pulse, JP+ & JP-. It jump the prescribed number of track (1,4,16,64).	53	COIN	I	the "H" by Micro Processor then it let
22	THLD	O	oscillate kick Pulse, JP+ & JP-. It jump the prescribed number of track (1,4,16,64).	54	CQCK	I	command by send with Synchronizing CQCK
23	TEST3	I	For TEST. Normal time is non connection.	55	RES	I	Turn on the Power Supply time : Once "L"
24	VDD		+ 5V	56	M/L	I	Data of SQOUT want at the LBS first time : M/L set the "L".
25	JP +	O	Comply with command of track jump, it oscillate kick Pulse, JP+ & JP-. It jump the prescribed number of track (1,4,16,64).	57	LASER	O	This output can control at Serial Control from
26	JP -	O	oscillate kick Pulse, JP+ & JP-. It jump the prescribed number of track (1,4,16,64).	58	16M	O	Micro Processor.
27	DEM O	I	For adjustment of production process. Sound on function.	59	4M	O	16M Output (16.9344MHz)
28	TEST4	I	For TEST. Normal time is non connection.	60	CONT	O	4M Output (4.2336MHz)
29	EMPH	O	Output is "H" time, it need de-emphasis.	61	TEST5	I	This output can control at Serial Control from
30	DFOF	I	ON/OFF Switching of Digital Filter. Output "H" : Filter OFF	62	CS	I	Micro Processor.
31	SMP2	O	Output of signal to DAC, Signal of Latch & L/	63	XIN	I	Chip select Terminal. This terminal "L" : LC7866NE is active.
32	SMP1	O	R select, Signal for Sampling Hold.	64	XOUT	O	(Internal Resistor : Pull Down)

IC BLOCK DIAGRAM & DESCRIPTION

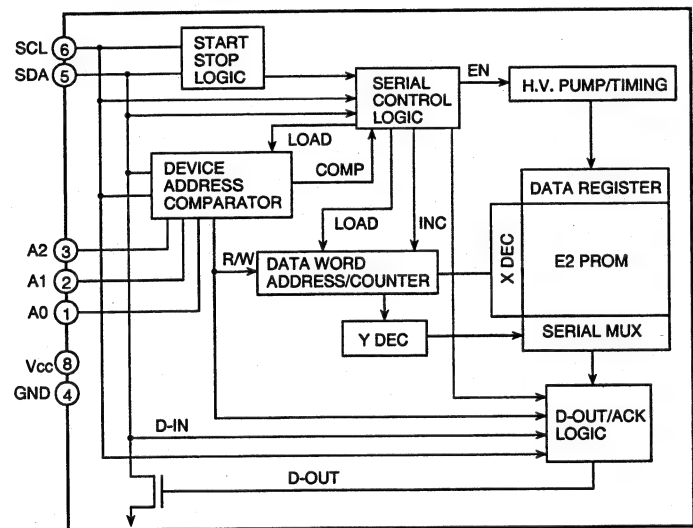
IC105 μ PD6379GR (D/A CONVERTER)



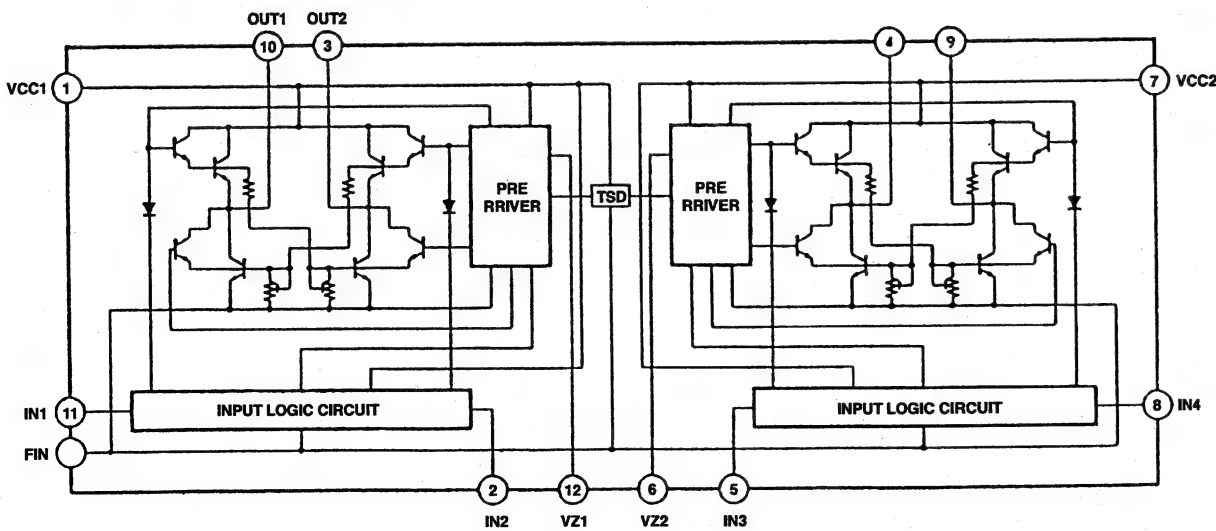
IC161
BU4051B
(8-CHANNEL ANALOG MULTIPLEXER)



IC112 24C08 (8K-BIT SERIAL ACCESS EEPROM)

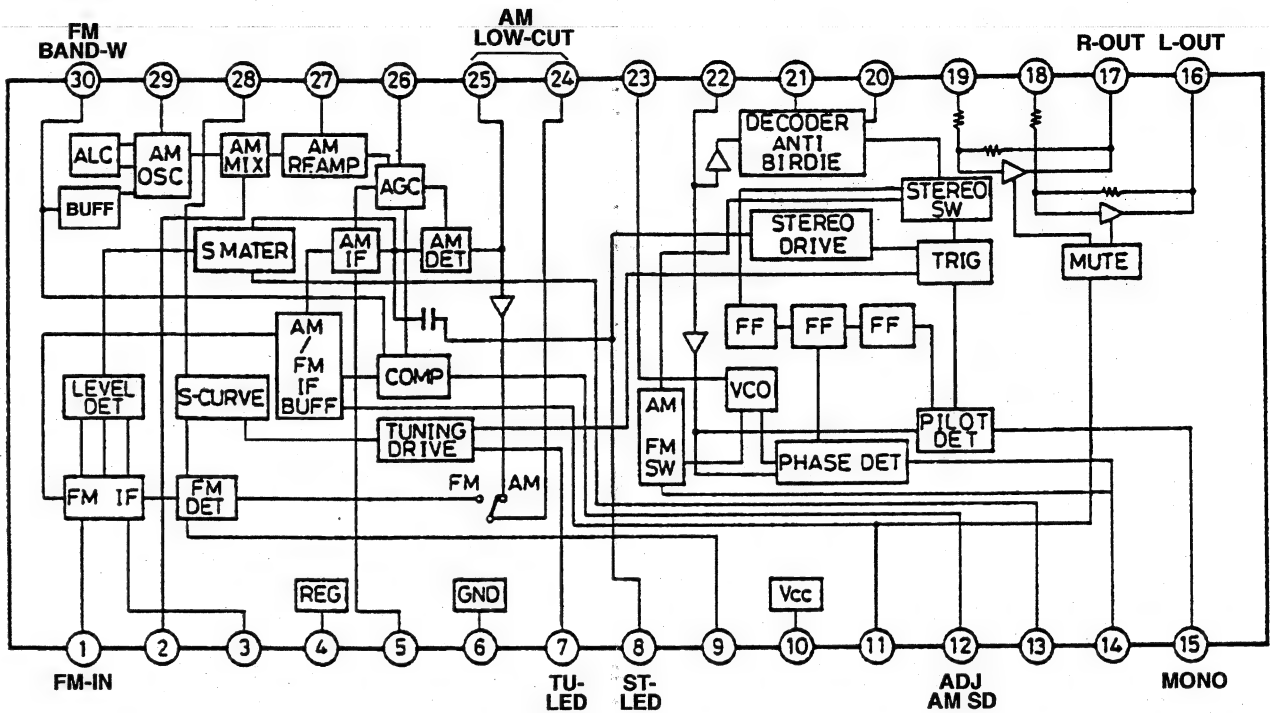


IC181 • IC182 LB1648 (MOTOR DRIVER)

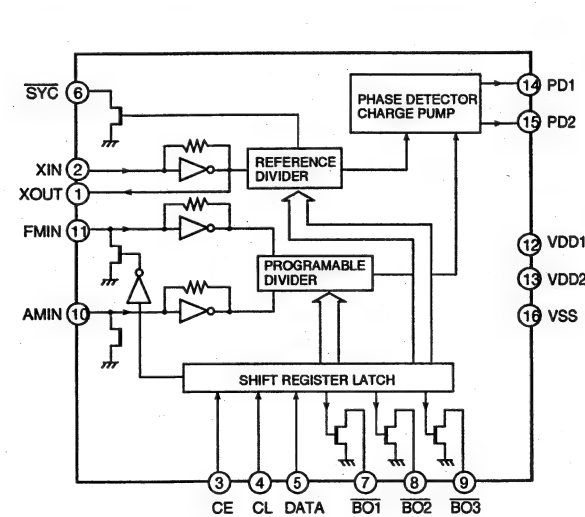


IC BLOCK DIAGRAM & DESCRIPTION

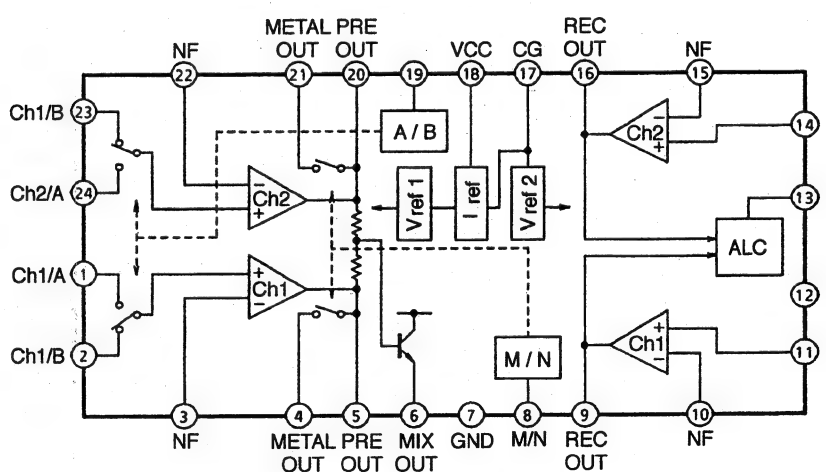
IC231 LA1836 (AM/FM TUNER)



IC245 LM7001 (PLL SYNTHESIZER)

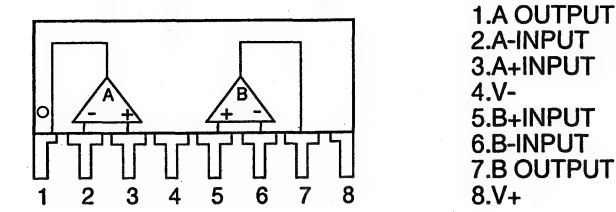


IC371 TA8189N (DUAL PRE-AMPLIFIER SYSTEM)

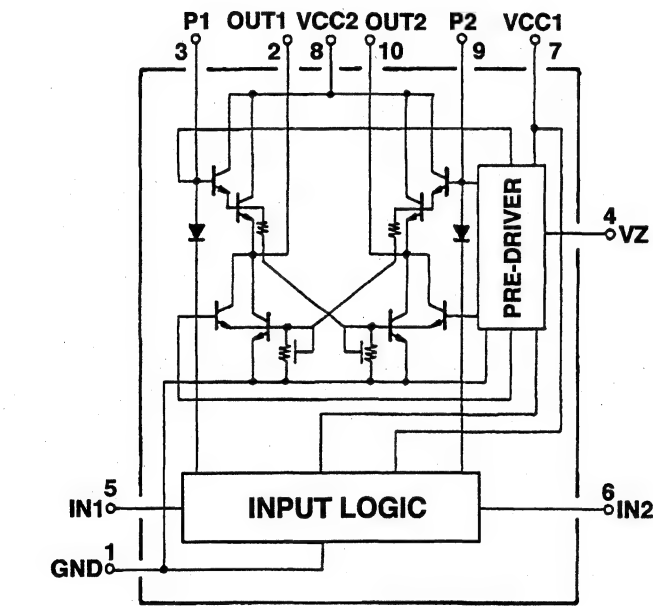


IC BLOCK DIAGRAM & DESCRIPTION

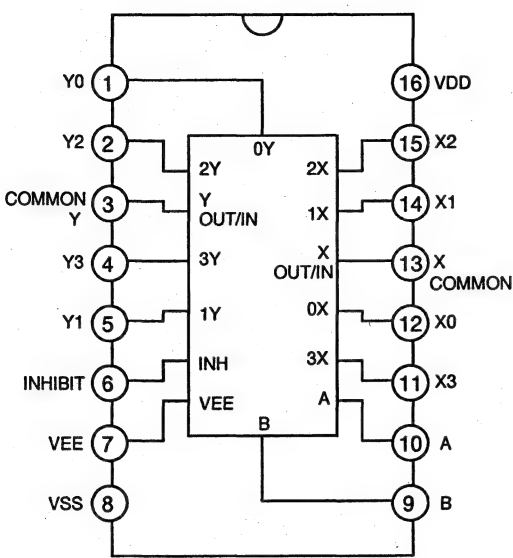
IC406 • IC479 • IC480 • IC482 • IC673
NJM4558 (OP AMP)



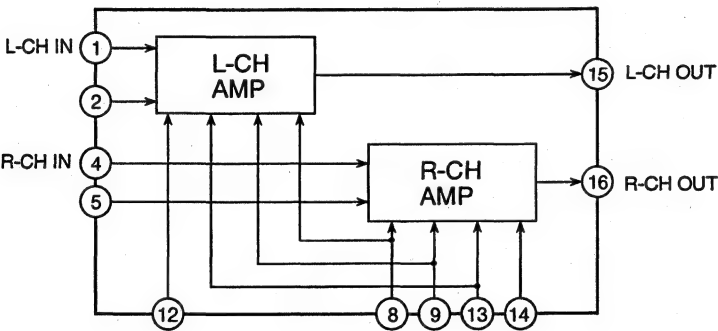
IC483
LB1641 (VOLUME CONTROL MOTOR DRIVER)



IC472 • IC486
BU4052B (DUAL 4-CHANNEL ANALOG MULTIPLEXER)



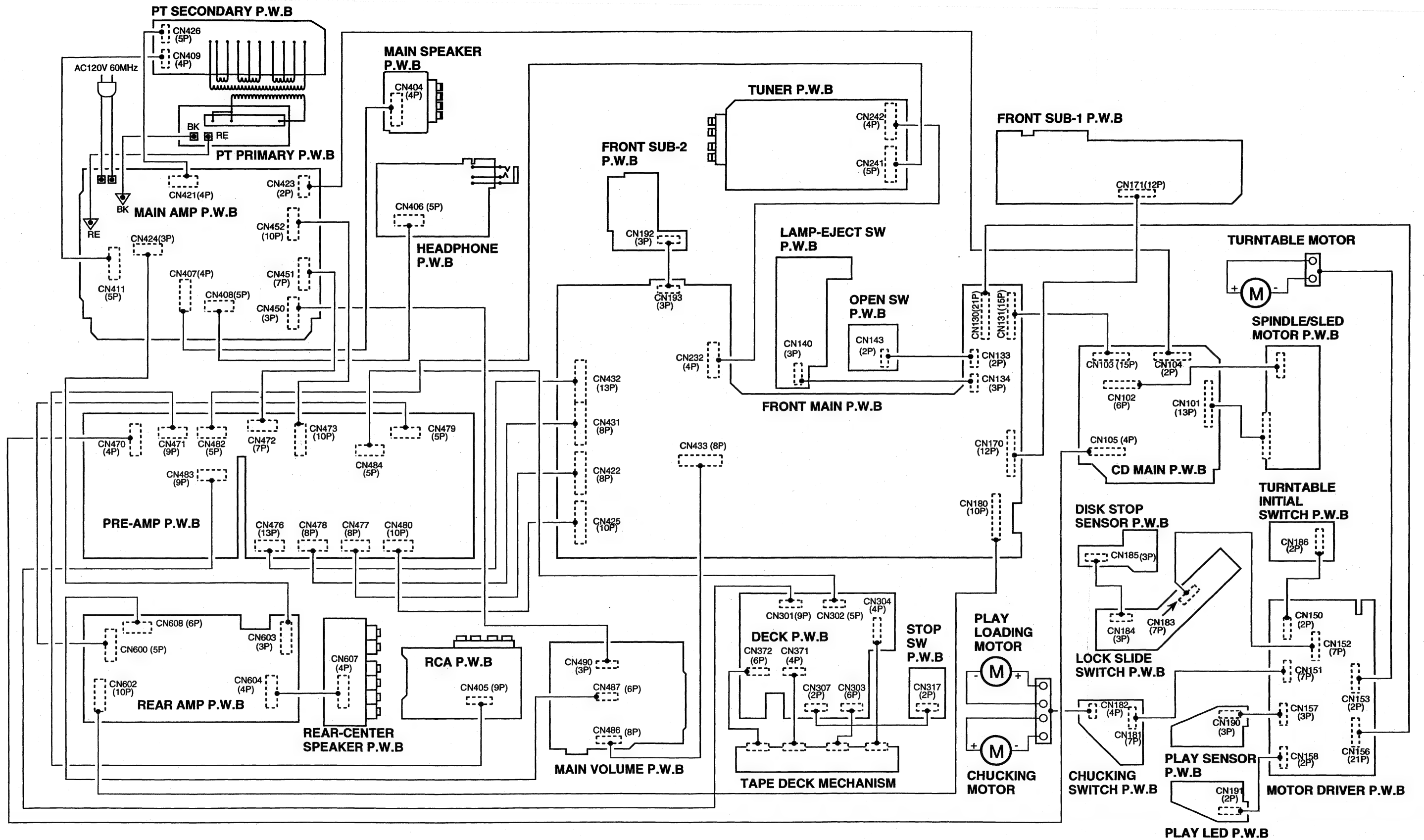
IC491 STK401-130 (2-CH AF POWER AMPLIFIER)
IC670 STK401-040



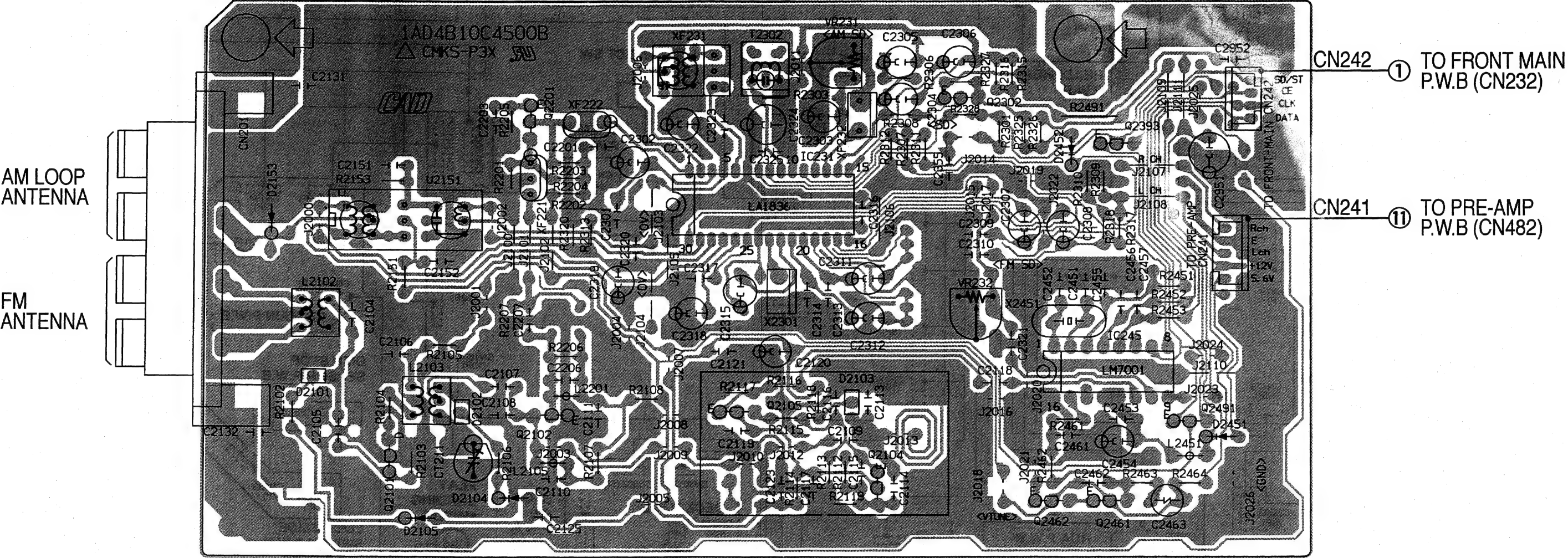
IC BLOCK DIAGRAM & DESCRIPTION

IC668 TMP47C203M (DOLBY CONTROL)

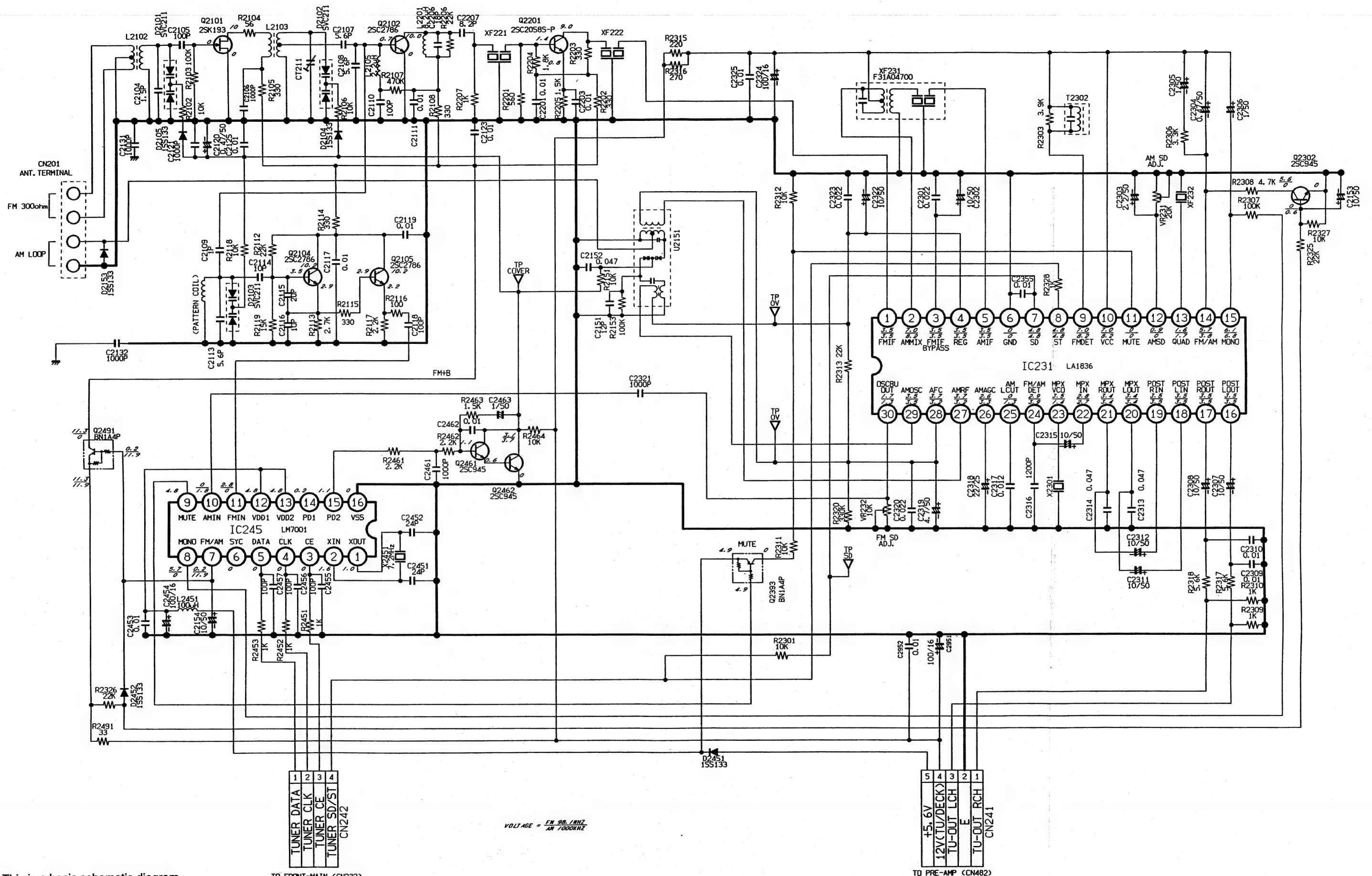
NO	PIN NAME	I/O	DESCRIPTION
1	XOUT	O	Connection Terminal of crystal oscillation (4.19MHz)
2	XIN	I	Connection Terminal of crystal oscillation (4.19MHz)
3	RESET	I	RESET
4	TEST_KEY	I	Test tone key (ON = "L")
5	MODE_KEY	I	Center mode key (ON = "L")
6	DOLBY_KEY	I	Dolby pro logic key (ON = "L")
7	CENTER_UP	I	Center up key (ON = "L")
8	CENTER_down	I	Center down key (ON = "L")
9	SUR_UP	I	Surround up key (ON = "L")
10	SUR_DOWN	I	Surround down key (ON = "L")
11	PRO LOGIC	O	Dolby pro logic LED (ON = "L")
12	NORMAL	O	Dolby normal LED (ON = "L")
13	WIDE	O	Dolby wide LED (ON = "L")
14	GND	-	GND
15	PHANTOM	O	Dolby phantom LED (ON = "L")
16	3-CH LOGIC	O	3-ch logic LED (ON = "L")
17	LR_MUTE	O	Front L,R speaker mute (MUTE ON = "H")
18	CENTER_MUTE	O	Center speaker mute (MUTE ON = "H")
19	SUR_MUTE	O	Rear speaker mute (MUTE ON = "H")
20	IR	I	Remote control signal
21	POWER_IN	I	Input of power from Main micro processor
22	MUTE_IN	I	Input of mute signal from Main micro processor
23	PROTECT_IN	I	Input of IC protect signal
24	CE	O	CE to LA2785, LV1010
25	DATA	O	Serial data to LA2785, LV1010
26	CLK	O	Serial clock to LA2785, LV1010
27	V-CHECK	I	Voltage check
28	VDD	-	VDD



TUNER P.W.B



SCHEMATIC DIAGRAM (TUNER)



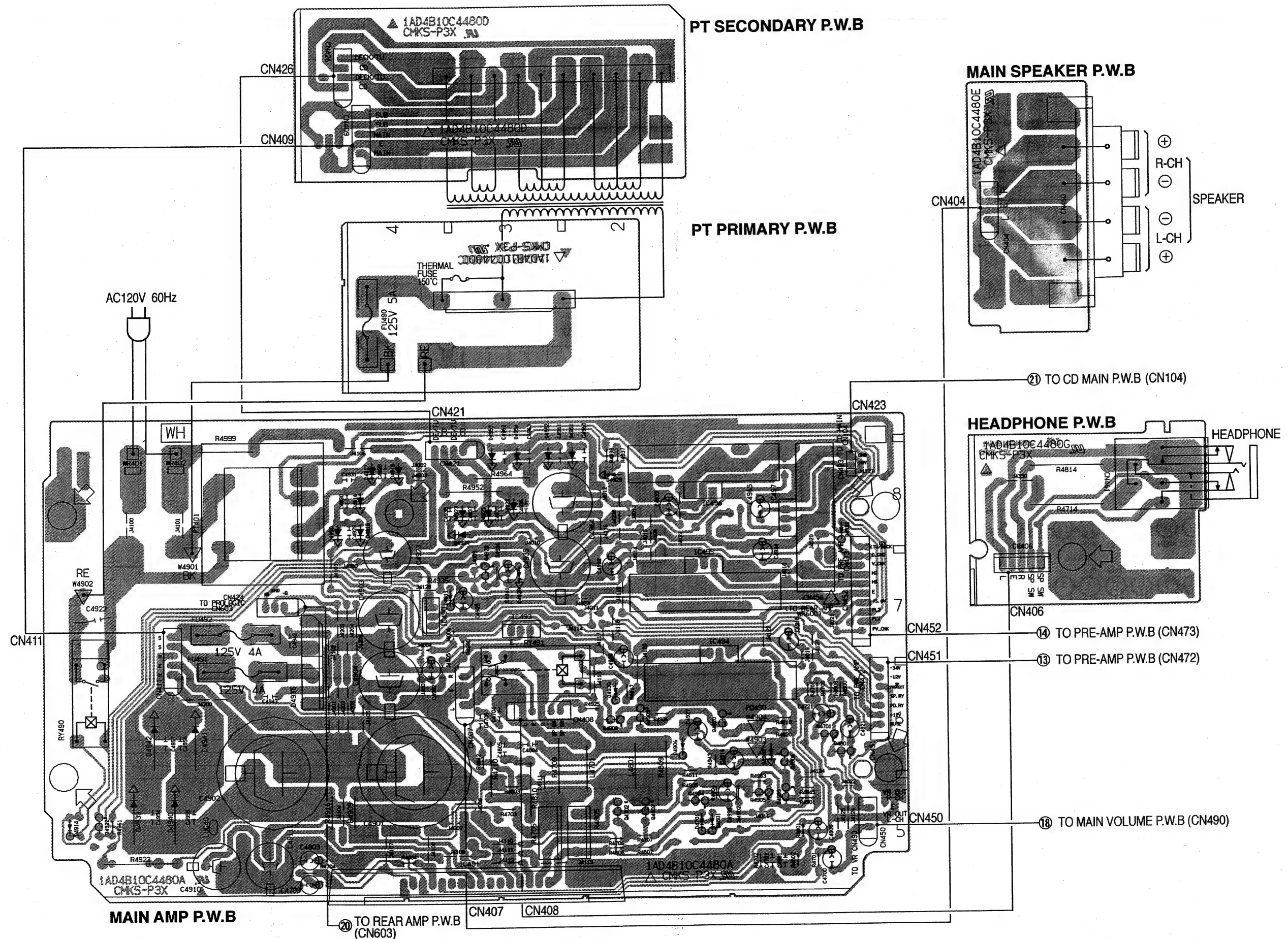
This is a basic schematic diagram.

TO FRONT-MAIN (CN232)

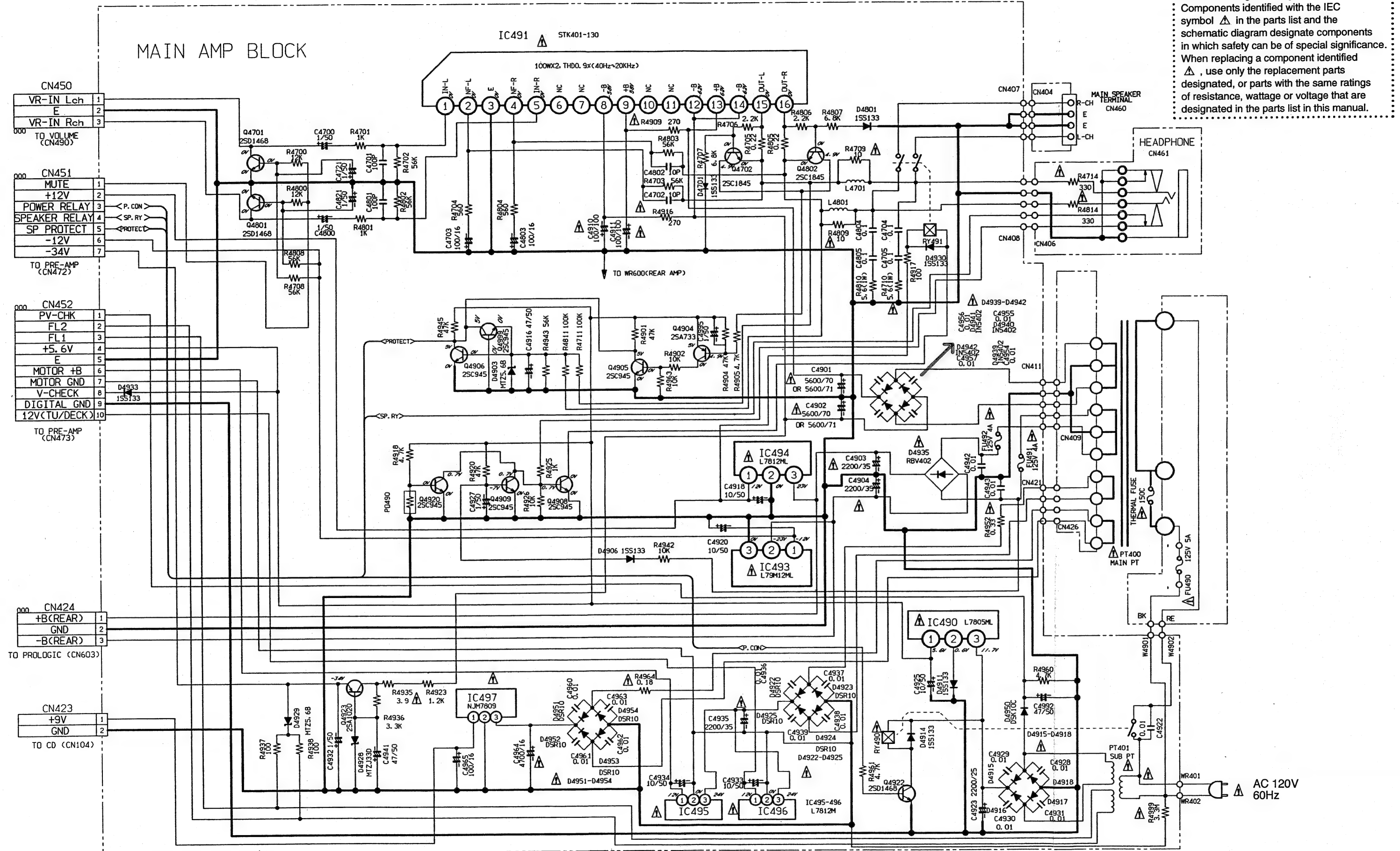
$$VOLTAGE = \frac{FM\ 98.1\text{MHz}}{AM\ 1000\text{KHz}}$$

TO PRE-AMP (CN482)

WIRING DIAGRAM (MAIN AMP)

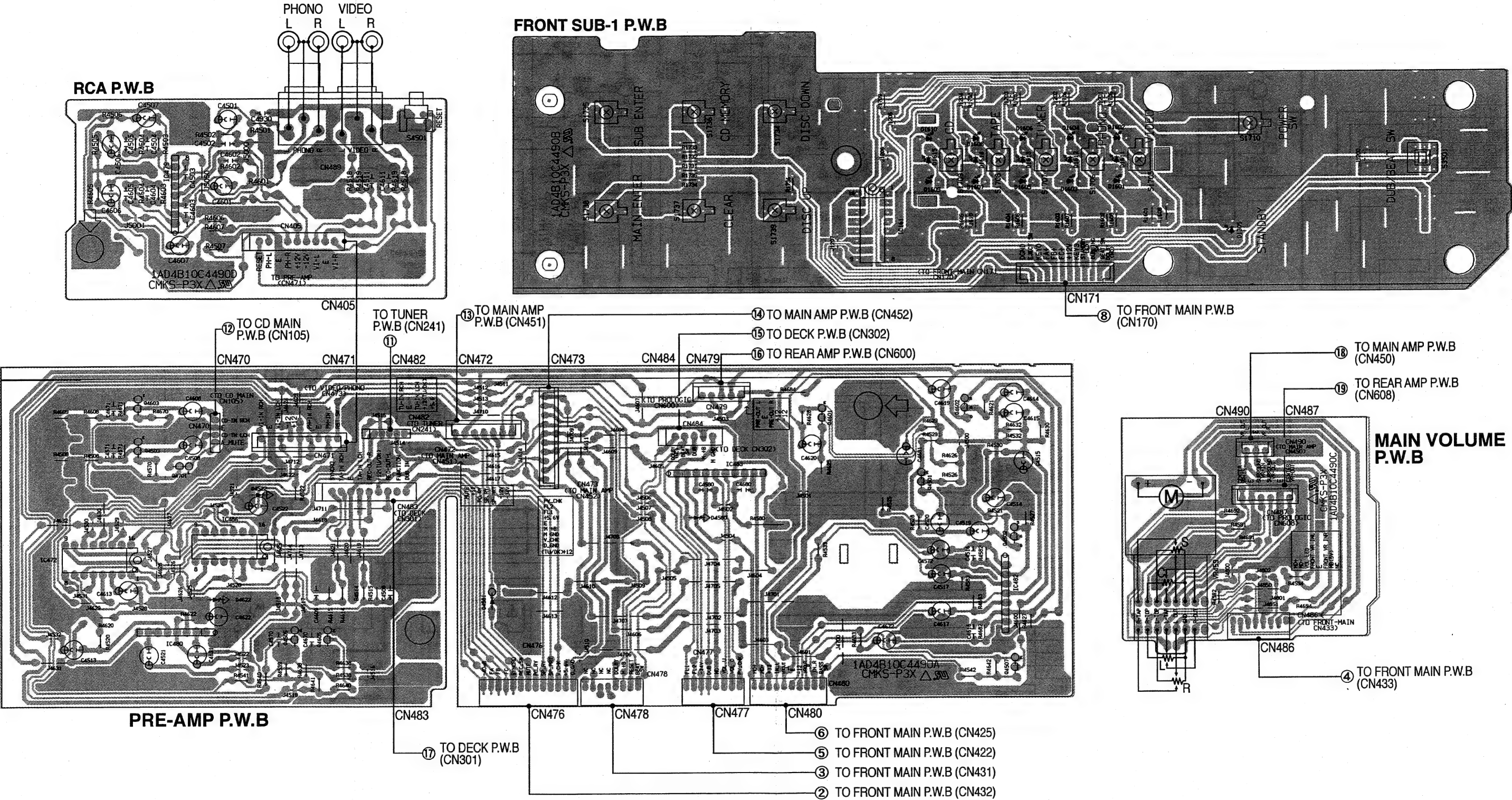


SCHEMATIC DIAGRAM (MAIN AMP)

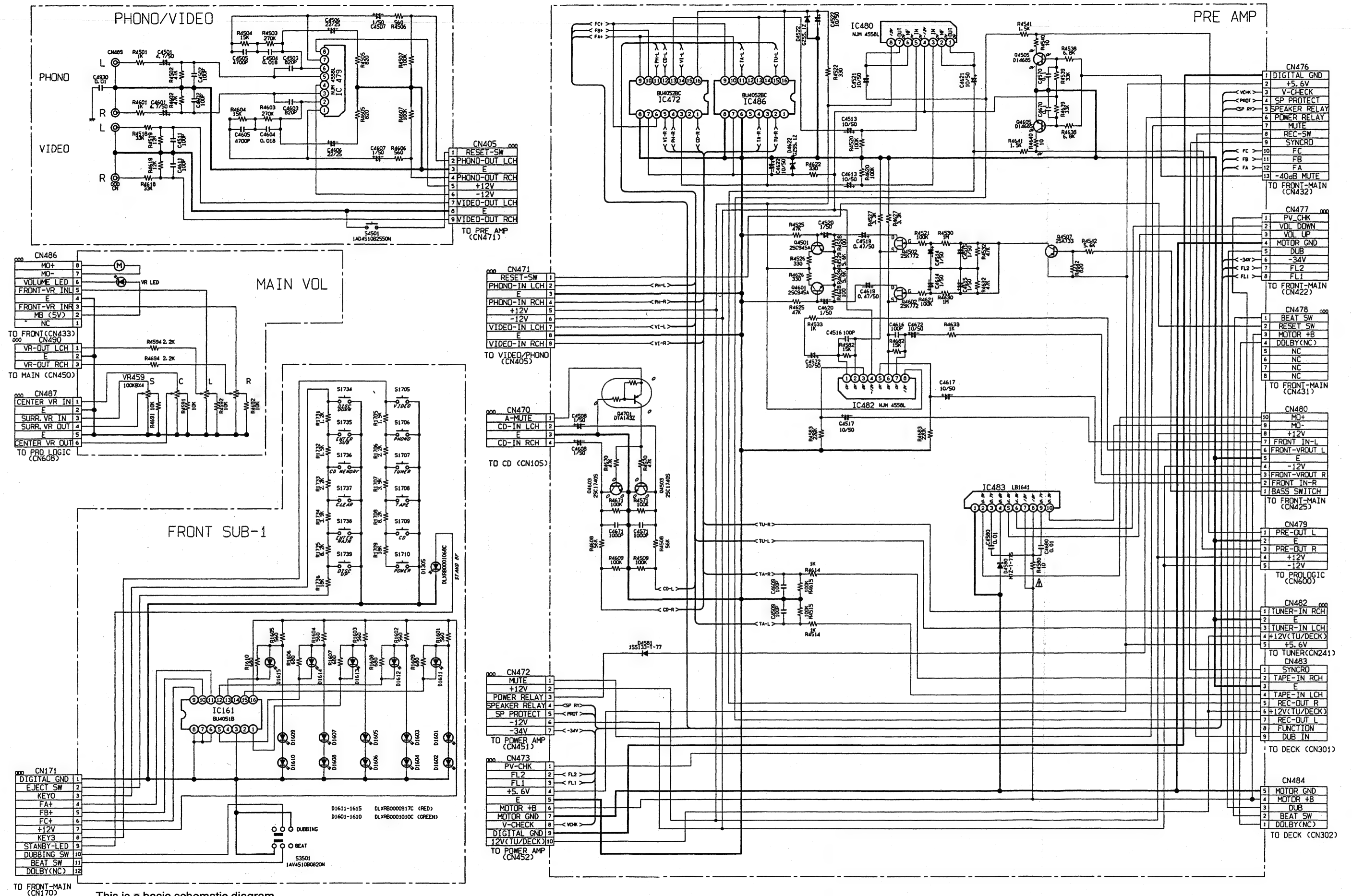


This is a basic schematic diagram.

WIRING DIAGRAM (PRE-AMP)

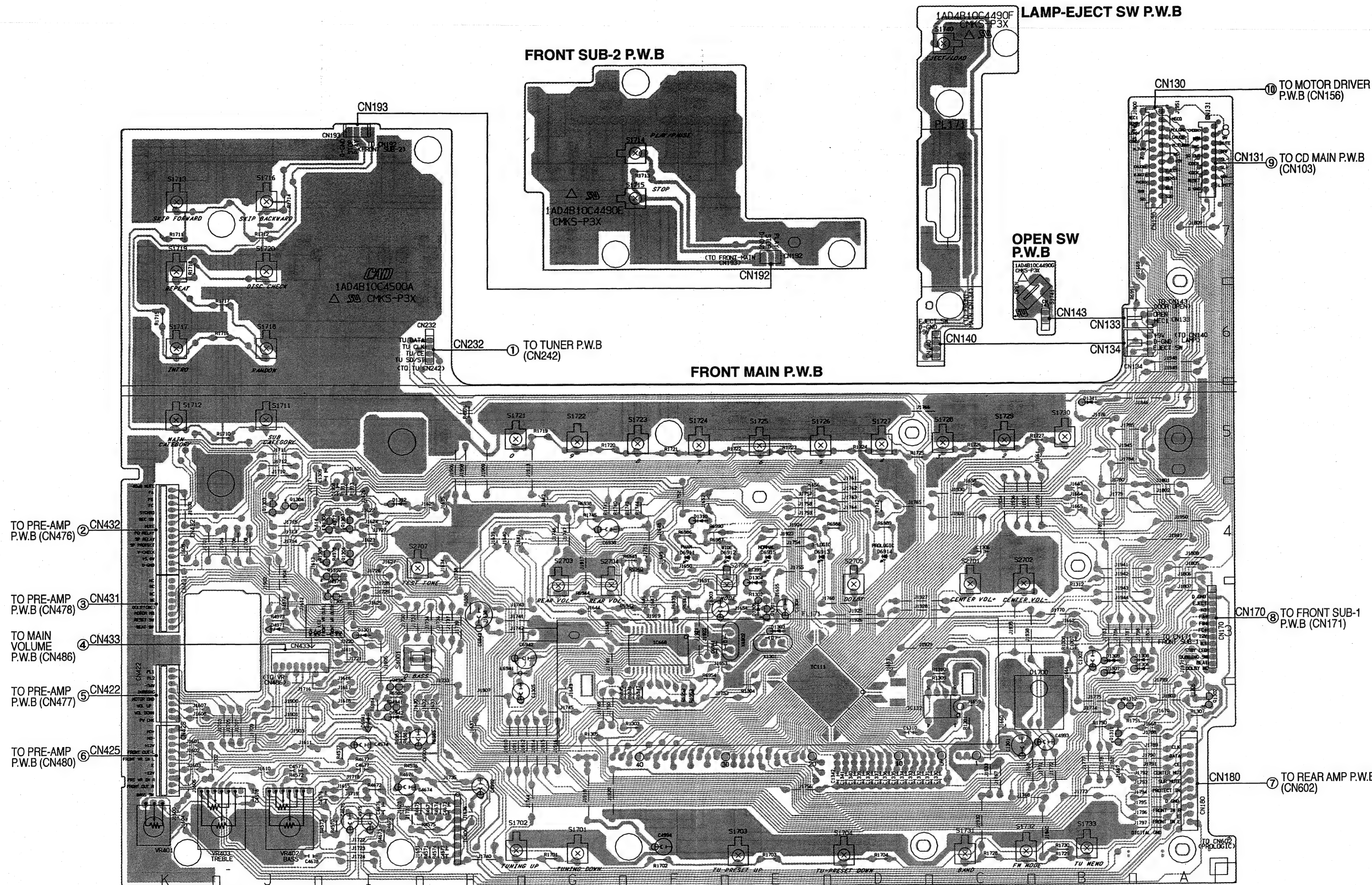


SCHEMATIC DIAGRAM (PRE-AMP)

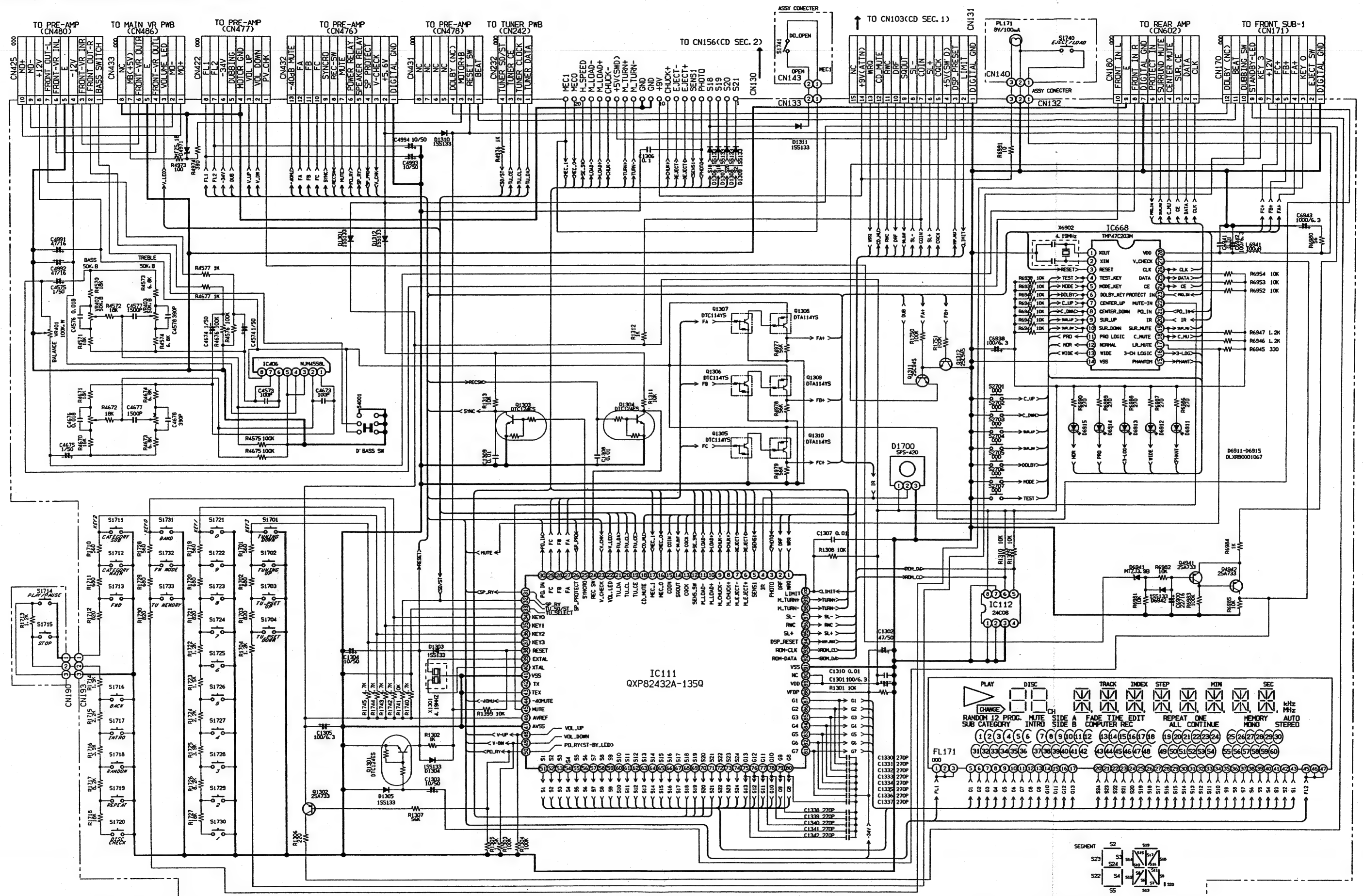


This is a basic schematic diagram.

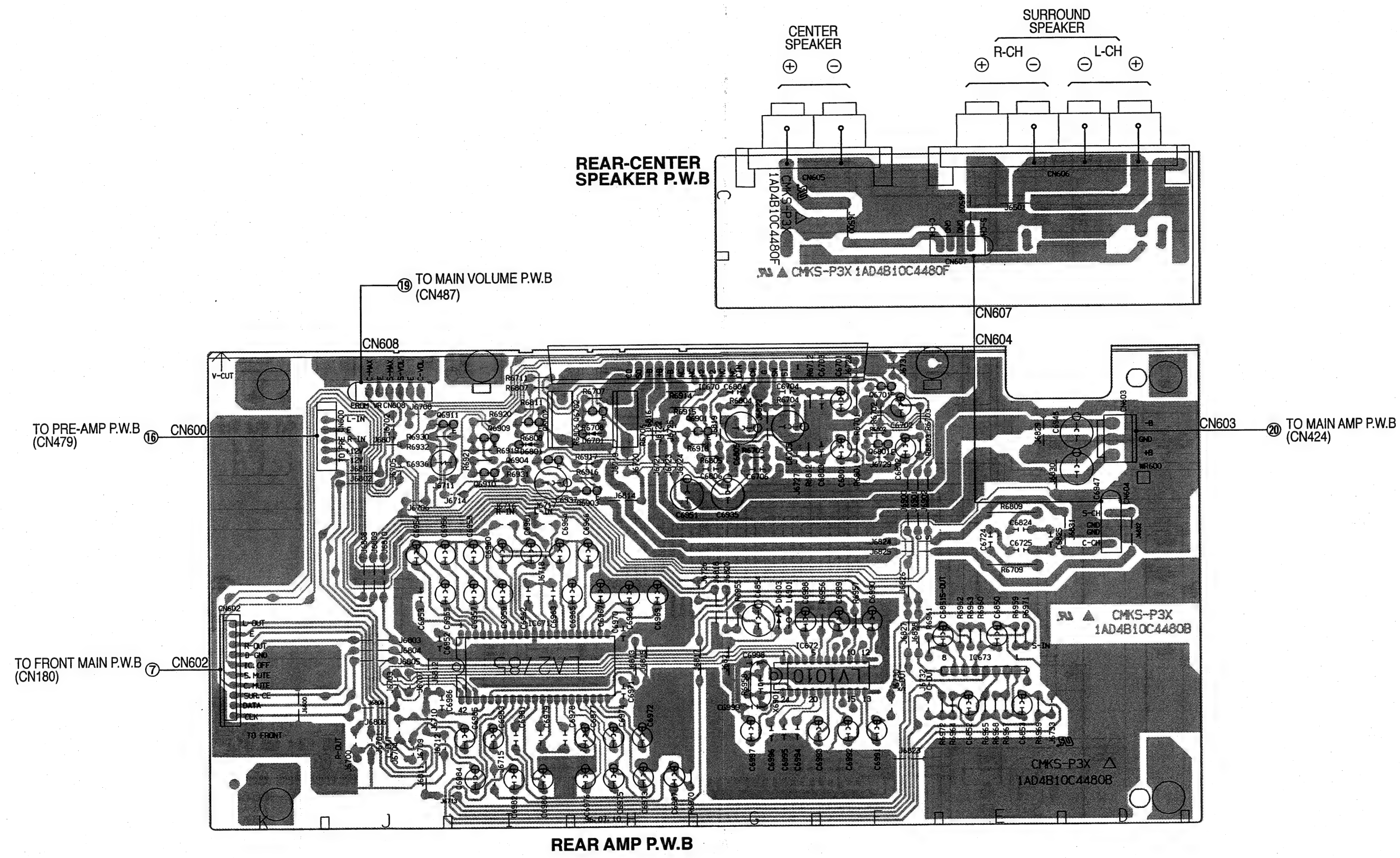
WIRING DIAGRAM (FRONT MAIN)



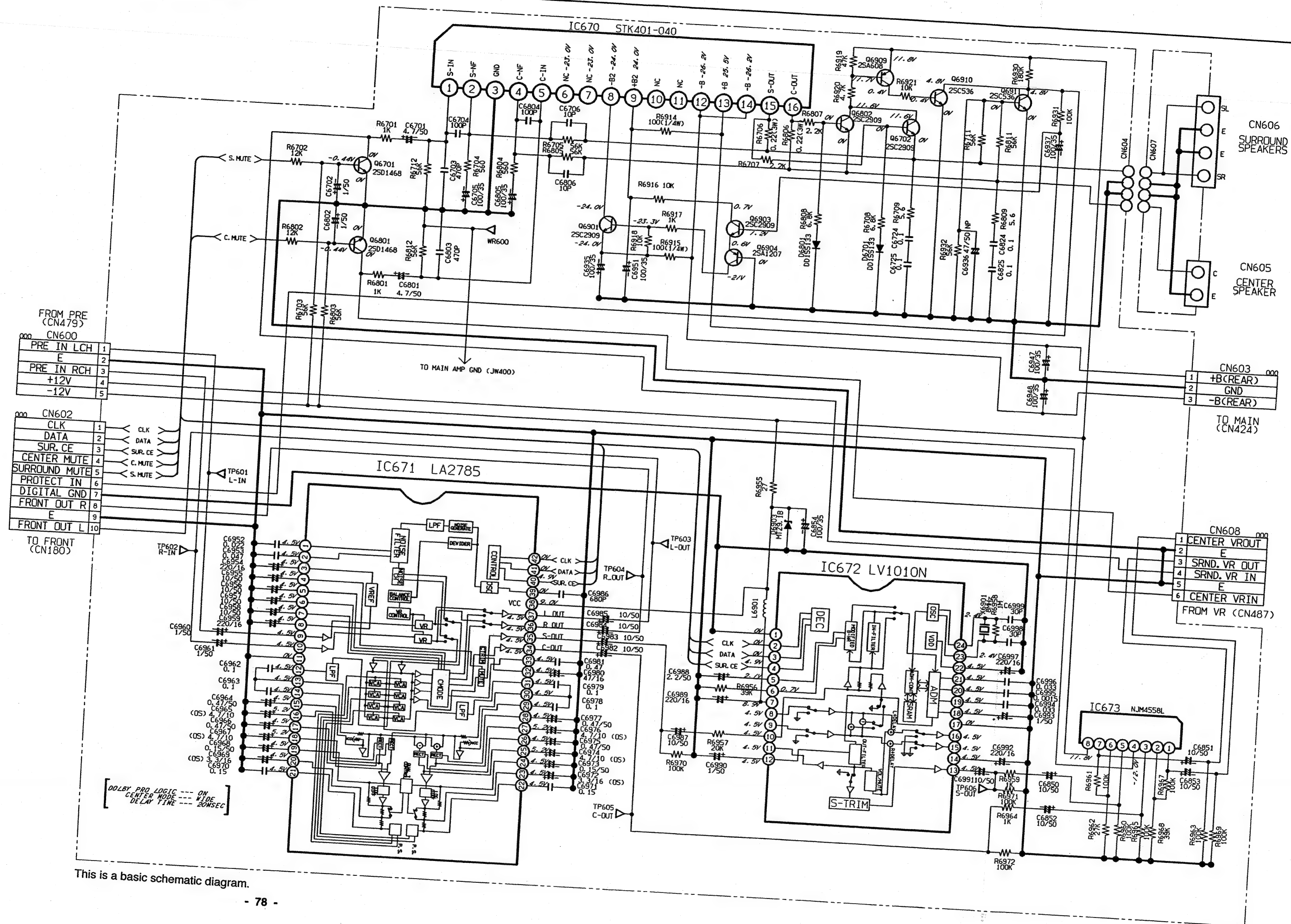
SCHEMATIC DIAGRAM (FRONT MAIN)

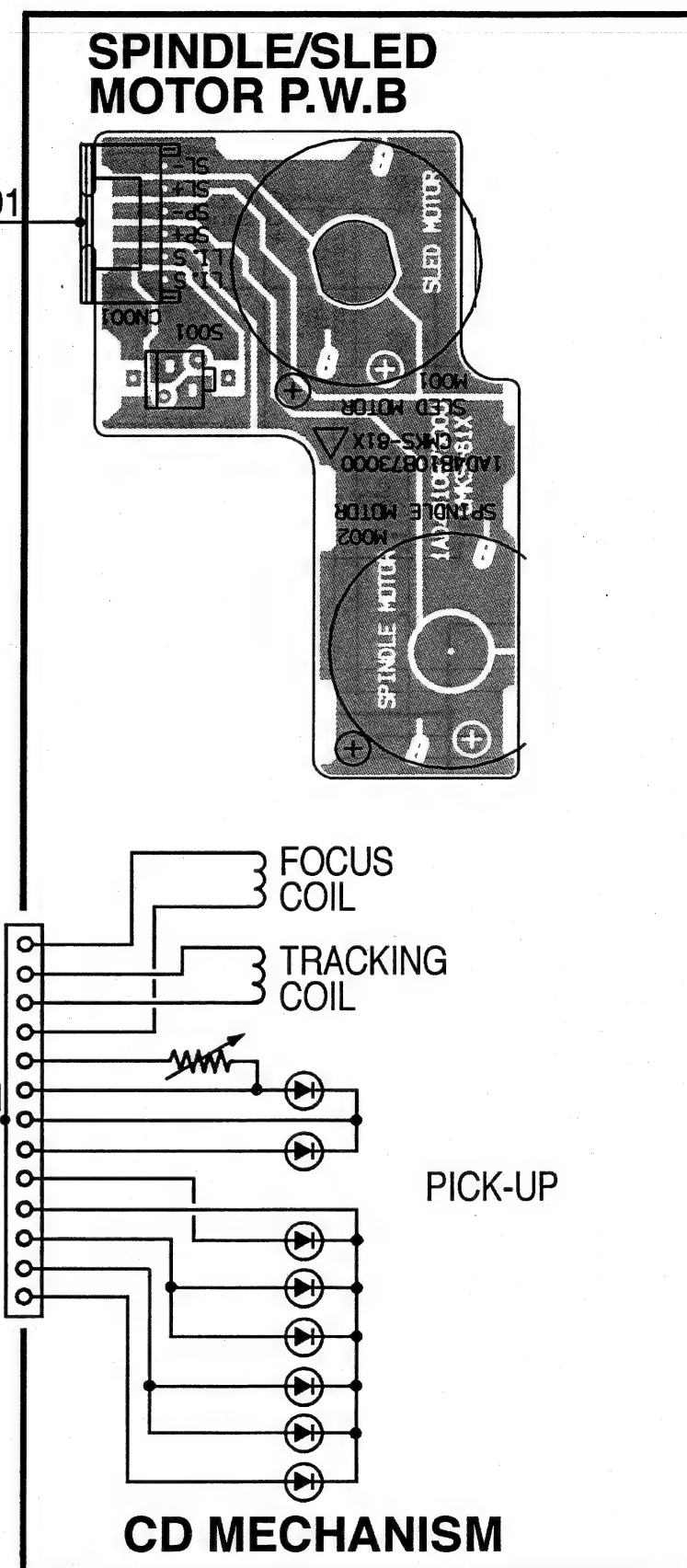
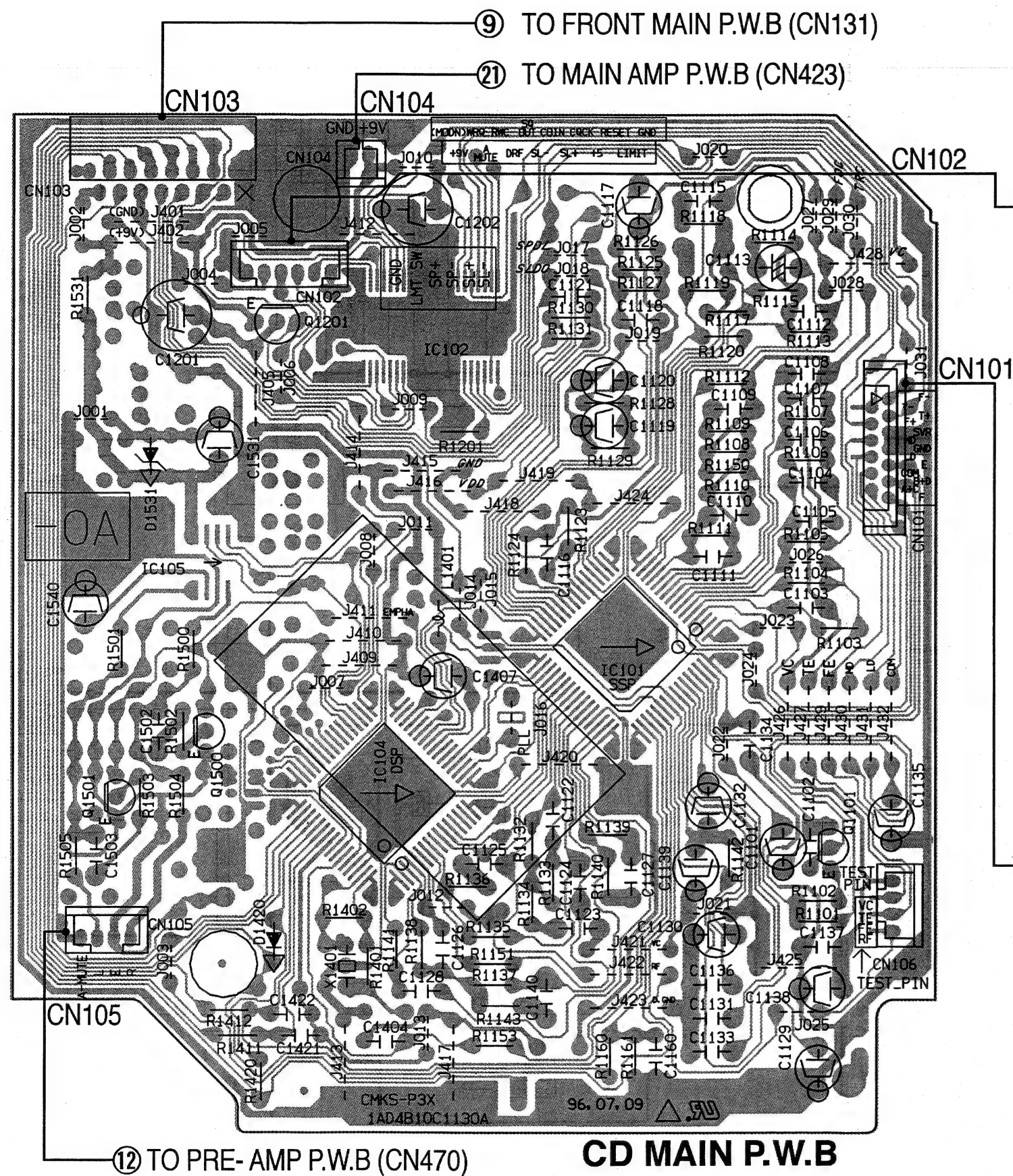


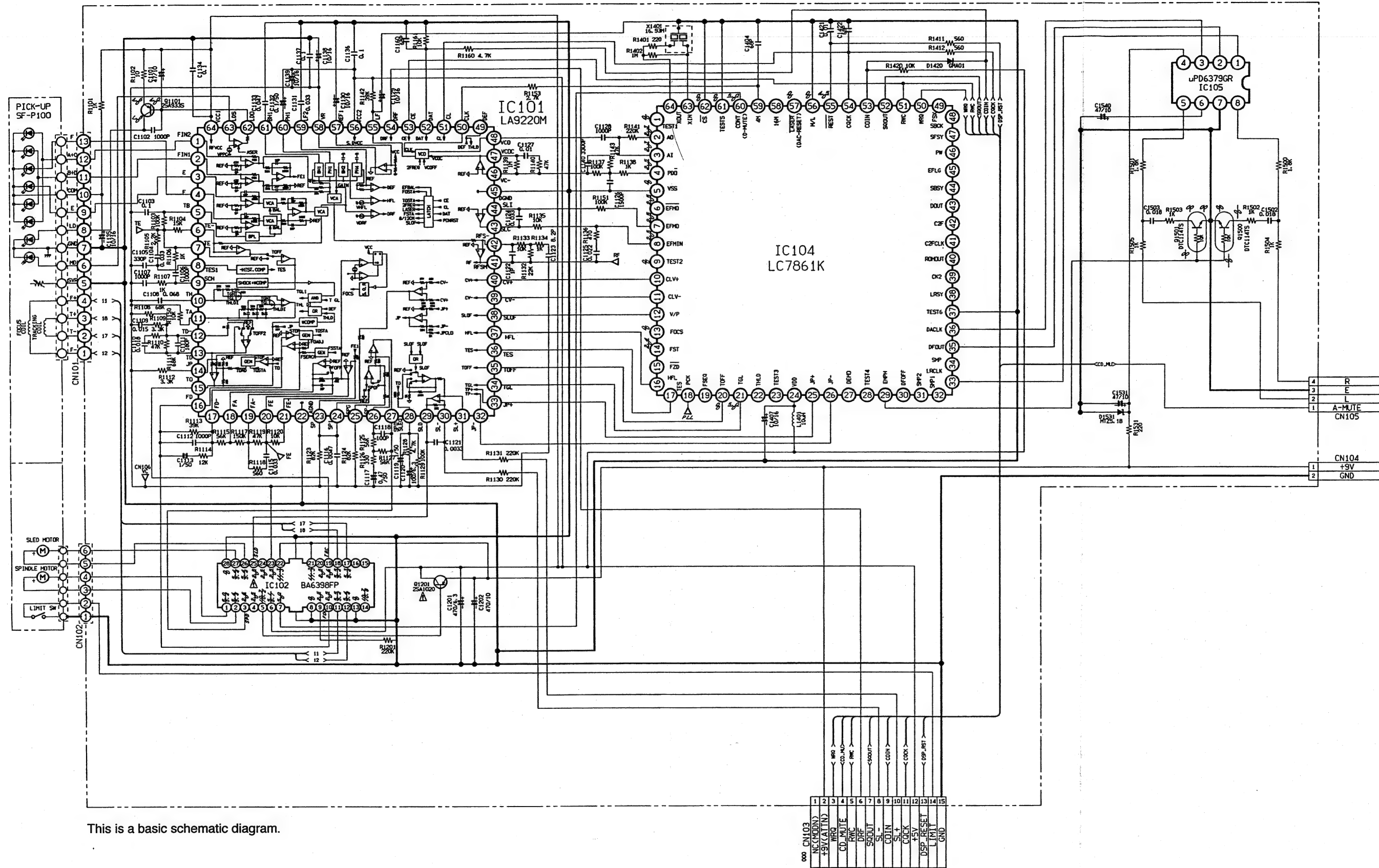
This is a basic schematic diagram.



SCHEMATIC DIAGRAM (REAR AMP)



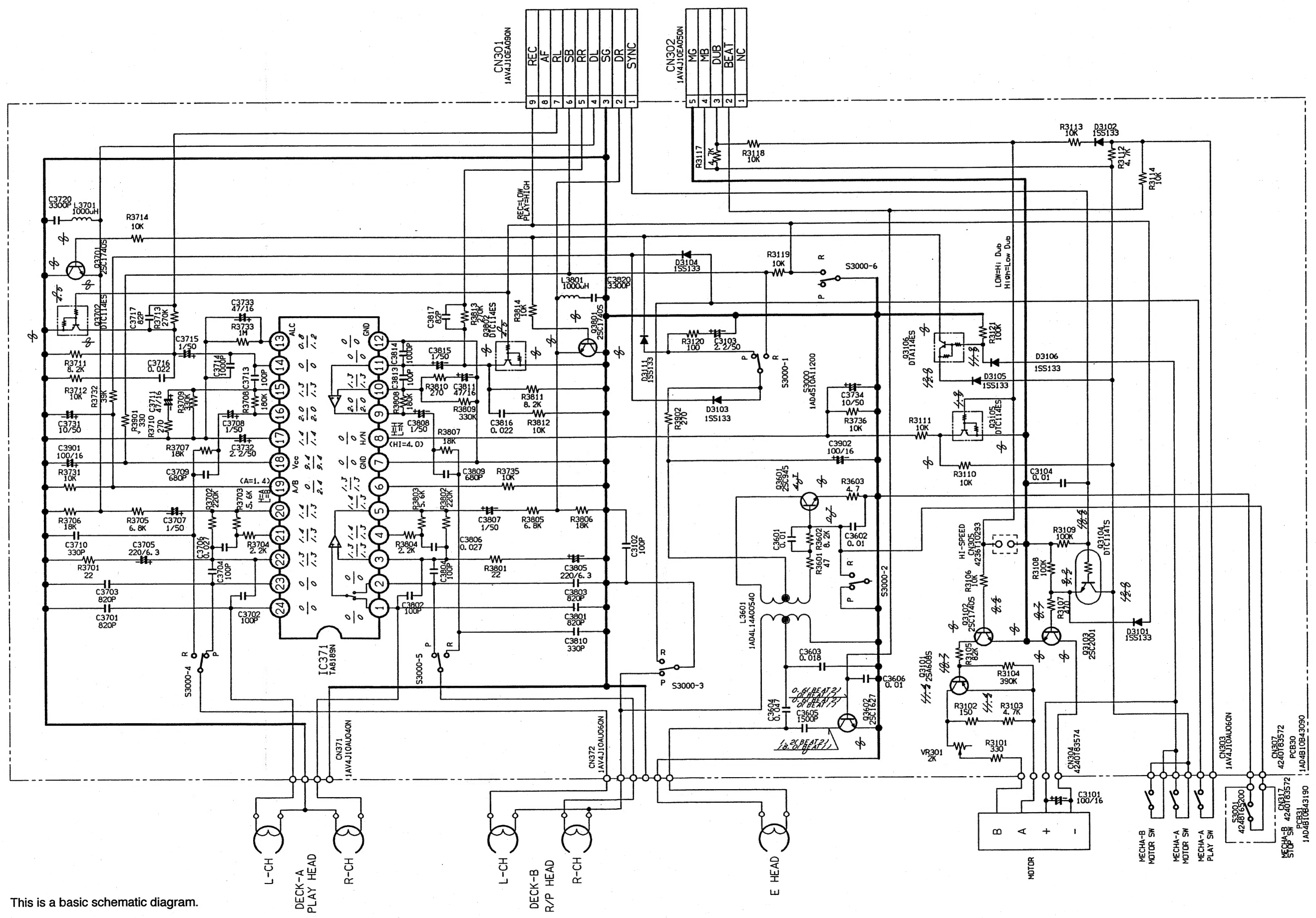






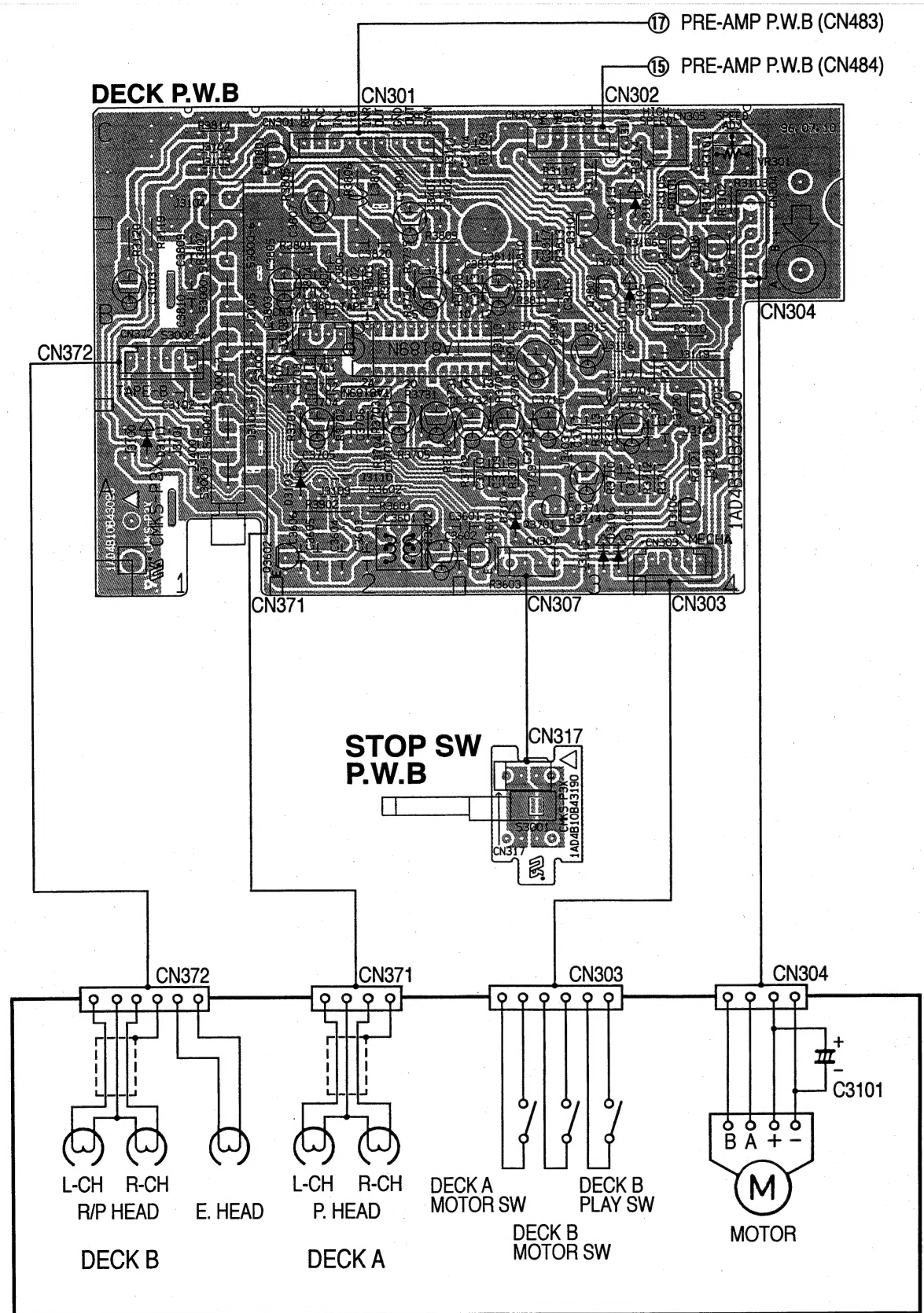


SCHEMATIC DIAGRAM (TAPE DECK)



This is a basic schematic diagram.

WIRING DIAGRAM (TAPE DECK)

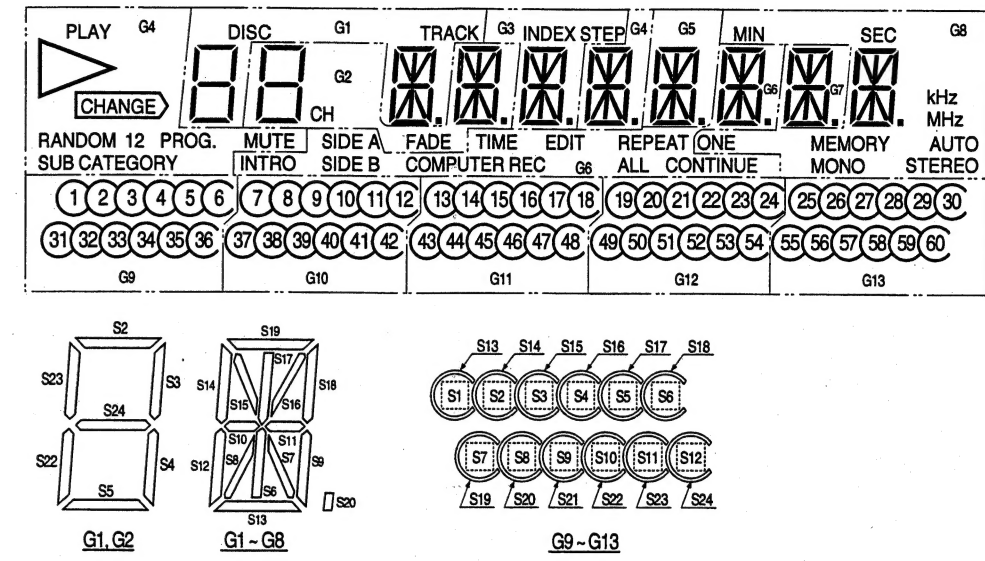


TAPE DECK MECHANISM

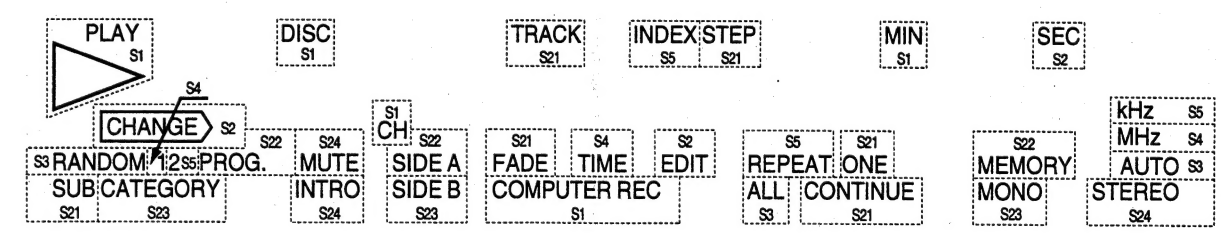
DISPLAY BLOCK

TYPE: CK1354C

ANODE GRID ASSIGNMENT



ANODE ASSIGNMENT



PIN ASSIGNMENT

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16
Assignment	F1	F1	F1	NP	G1	G2	G3	G4	G5	G6	G7	G8	G9	G10	G11	G12
Pin No.	17	18	19	20	21	22	23	24	25	26	27	28	29	30	31	32
Assignment	G13	NL	NL	S24	S23	S22	S21	S20	S19	S18	S17	S16	S15	S14	S13	S12
Pin No.	33	34	35	36	37	38	39	40	41	42	43	44	45	46	47	
Assignment	S11	S10	S9	S8	S7	S6	S5	S4	S3	S2	S1	NP	F2	F2	F2	

F1, F2: Filament G1 - G13: Grid S1 - S24: Anode NP: No Pin NL: No Lead

IC VOLTAGES

IC101 LA9220M

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STOP	0	2.5	0	2.5	2.5	2.5	2.6	2.5	2.5	2.5	2.6	2.5	2.6	2.6	2.6
PLAY	2.5	2.5	2.5	2.5	2.5	2.5	2.6	2.5	2.4	2.6	2.6	2.5	2.6	2.6	2.5
Pin No.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
STOP	2.6	2.5	2.6	2.6	2.6	2.6	0	2.5	2.5	2.6	2.6	2.5	2.5	2.6	2.4
PLAY	2.6	2.5	2.6	2.5	2.6	2.6	0	2.5	2.5	2.5	2.6	2.8	2.5	2.7	2.4
Pin No.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
STOP	2.4	0	0	5.0	5.0	0	0	5.0	0	0	1.6	2.4	2.5	2.5	0
PLAY	2.4	0	0	5.0	0	0.9	0	0	0	1.0	2.5	2.4	2.5	2.5	0
Pin No.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	2.5	2.5	4.4	0	2.4	4.9	0	0	0	2.7	5.0	2.6	2.6	0	0
PLAY	2.6	1.8	4.4	0	2.4	4.9	4.8	0	4.9	2.7	5.0	2.6	2.6	2.7	2.7
Pin No.	61	62	63	64											
STOP	2.2	4.3	0	5.0											
PLAY	2.2	3.7	0	5.0											

IC102 BA6398FP

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STOP	4.2	4.2	2.5	2.5	8.0	5.0	0	0	2.5	0	4.1	0	0	8.4	0
PLAY	Fluc	Fluc	Fluc	2.5	7.8	5.0	5.0	0	0	2.5	4.1	4.2	0	8.4	0
Pin No.	16	17	18	19	20	21	22	23	24	25	26	27	28		
STOP	0	4.1	4.1	2.6	2.5	8.9	8.9	2.5	2.5	2.5	4.2	4.2	0		
PLAY	0	Fluc	Fluc	0	2.5	8.9	8.9	2.5	2.5	Fluc	Fluc	Fluc	0		

IC104 LC7861KE

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STOP	0	2.3	2.3	2.7	0	2.3	2.3	2.6	0	0	0	5.0	0	2.5	4.2
PLAY	0	2.3	2.3	2.4	0	2.5	2.5	2.6	0	Fluc	0	0	0	2.5	4.2
Pin No.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
STOP	4.2	0.5	1.8	0	5.0	5.0	0	0	5.0	0	0	0	0	0	5.0
PLAY	0	0.6	2.0	5.0	2.5	5.0	0	0	5.0	0	0	0	0	0	5.0
Pin No.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
STOP	1.3	1.3	2.5	2.5	0	2.3	0	2.5	2.3	1.8	2.5	4.6	2.6	0	2.3
PLAY	1.3	1.3	2.5	2.5	1.7	2.3	0	2.5	2.4	Fluc	2.5	0	2.7	0	0
Pin No.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	0	2.5	0	2.5	0	0	0	0	5.0	5.0	0	5.0	2.3	2.0	5.0
PLAY	0	2.5	0	2.5	0	0	0	0	5.0	5.0	0	0	2.3	2.0	5.0
Pin No.	61	62	63	64											
STOP	0	0	2.5	2.5											
PLAY	0	0	2.5	2.5											

IC105 μPD6379GR

Pin No.	1	2	3	4	5	6	7	8							
STOP	Fluc	Fluc	Fluc	5.0	2.5	5.0	0	2.5							
PLAY	Fluc	Fluc	Fluc	5.0	2.5	5.0	0	2.5							

IC112 24C08

Pin No.	1	2	3	4	5	6	7	8							
STOP/PLAY	0	0	0	0	5.0	0	5.0	5.0							

IC181 LB1648

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12			
STOP/PLAY	9.0	5.0	0.5	0.5	5.0	2.8	9.0	5.0	0.5	0.5	5.0	3.0			

IC182 LB1648

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12			
STOP/PLAY	9.0	0	0	0.5	5.0	2.1	9.0	5.0	0.5	0	0	3.0			

IC406 NJM4558L

Pin No.	1	2	3	4	5	6	7	8							
	5.3	5.3	5.3	0	5.3	5.3	5.3	10.5							

IC479 NJM4558L

Pin No.	1	2	3	4	5	6	7	8							
	5.3	5.3	5.3	0	5.3	5.3	5.3	10.6							

IC VOLTAGES

IC111 CXP82432

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
STOP	0	0	5.0	0	0	5.0	5.0	5.0	5.0	5.0	5.0	0	5.0	0	0
PLAY	0	5.0	5.0	0	0	5.0	5.0	5.0	5.0	5.0	5.0	0	5.0	0	5.0
Pin No.	16	17	18	19	20	21	22	23	24	25	26	27	28	29	30
STOP	Fluc	Fluc	0	0	0	0	0	5.0	0	0	4.3	0	0	0	0
PLAY	Fluc	Fluc	0	0	0	0	0	5.0	0	0	4.3	0	0	0	0
Pin No.	31	32	33	34	35	36	37	38	39	40	41	42	43	44	45
STOP	5.0	5.0	0	5.0	5.0	5.0	5.0	5.0	Fluc	Fluc	0	5.0	0	0	0
PLAY	5.0	5.0	0	5.0	5.0	5.0	5.0	5.0	Fluc	Fluc	0	5.0	0	0	0
Pin No.	46	47	48	49	50	51	52	53	54	55	56	57	58	59	60
STOP	5.0	0	5.0	5.0	5.0	-17	-2.5	-24	-25	-30	-29	-29	-29	-10	-18
PLAY	5.0	0	5.0	5.0	5.0	Fluc	0	0	-27	-27	-33	-33	-33	-19	-23
Pin No.	61	62	63	64	65	66	67	68	69	70	71	72	73	74	75
STOP	-20	-13	-18	-28	-28	0	-14	-15	-23	-26	-27	-32	-32	-32	-28
PLAY	-19	-23	-14	-27	-33	0	-33	-11	Fluc	-27	0	-32	0	0	0
Pin No.	76	77	78	79	80	81	82	83	84	85	86	87	88	89	90
STOP	-28	-28	-28	-28	-28	-27	Fluc	0	-27	-28	-28	-28	-33	5.0	0
PLAY	-26	Fluc	-26	Fluc	0	Fluc	-26	-26	-25	-26	-25	-7.6	-33	-8.0	-9.0
Pin No.	91	92	93	94	95	96	97	98	99	100					
STOP	0	5.0	5.0	5.0	0	0	0	5.0	5.0	5.0					
PLAY	0	5.0	5.0	5.0	0	0	0	5.0	5.0	5.0					

IC472 BU4052BC

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	5.2	1.8	5.2	5.2	5.2	0	0	0	0	0	5.2	5.2	5.2	5.2	0
Pin No.	16														
	0.5														

IC480 NJM4558L

Pin No.	1	2	3	4	5	6	7	8							
	5.2	5.2	5.2	0	5.2	5.2	5.2	10.5							

IC482 NJM4558L

Pin No.	1	2	3	4	5	6	7	8							
	5.3	5.3	5.3	0	5.3	5.3	5.3	10.5							

IC483 LB1641

Pin No.	1	2	3	4	5	6	7	8	9	10					
	0	0.5	0.7	5.0	0	0	11.2	11.2	0.7	0.5					

IC486 BU4052BC

Pin No.	1	2	3	4	5	6	7	8	9	10	11	12	13	14	15
	5.2	5.2	5.2	5.2	0	0	0	0	0	0	0.2	5.2	5.2	0.2	5.2
Pin No.	16														
	10.5														

For Parts or Service Contact
SANYO FISHER SERVICE CORPORATION.
1200 West Artesia Blvd., Compton, California 90220

Notice



<input checked="" type="checkbox"/> CORRECTION	<input type="checkbox"/> PRODUCTION CHANGE
<input type="checkbox"/> SERVICE FLASH	<input type="checkbox"/> ADD INFORMATION
<input type="checkbox"/>	<input type="checkbox"/>

FILE NO.

Please add this notice to the Service Manual listed below.

Category : **Audio Home Entertainment**
Center with Dolby Pro Logic
Studio 24 CD Management

Date : **Dec. 1996**

Model : **TAD-9625**

Destination : **US**

Reference No. : **SM580718**

Issue Number : **1**

The reason of change.

A : Misprint

B : Quality Reliabilities

C : Standardization

D : Design

E :

F :

G :

Page & Section	Ref. No.		Part No.	Description	Q'ty	Interchangeability	Reason
	1	Old	614 281 7476	CABINET	1		A
PARTS LIST	1	New	614 281 7148	ASSY, CABINET (with HANDLE)	1		A
P29	2	Old	614 224 1264	HANDLE	1		A
	2	New	-				A

Prod. cord : 129 493 00